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**California Department of Education Assessment Development & Administration Division**

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# California Assessment of Student Performance and Progress Smarter Balanced Technical Report 2018–‍2019 Administration

## Chapter 8 Appendices

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**Educational Testing Service**



**Contract No. CN150012**

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### Appendix 8.A: IRT Parameter Estimates

IRT parameter estimates used in the 2018–2019 administration of the Smarter Balanced Summative Assessments were derived from the 2013–2014 field tests and the operational assessments from the 2014–2015 through the 2017–2018 assessments with embedded field tests. The Smarter Balanced Assessment Consortium conducted calibration and equating for all item parameter estimates.

Table 8.A. IRT *a*-values for Grade Three—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 317 | 0.70 | 0.25 | 0.19 | 1.52 |
| Claim 2 | 275 | 0.68 | 0.20 | 0.18 | 1.21 |
| Claim 3 | 186 | 0.54 | 0.17 | 0.21 | 1.01 |
| Claim 4 | 157 | 0.67 | 0.24 | 0.18 | 1.29 |
| **All Items** | 935 | 0.66 | 0.23 | 0.18 | 1.52 |

Table 8.A. IRT *a*-values for Grade Four—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 279 | 0.64 | 0.23 | 0.15 | 1.41 |
| Claim 2 | 310 | 0.60 | 0.22 | 0.17 | 1.25 |
| Claim 3 | 204 | 0.55 | 0.17 | 0.19 | 1.14 |
| Claim 4 | 187 | 0.58 | 0.20 | 0.15 | 1.29 |
| **All Items** | 980 | 0.60 | 0.21 | 0.15 | 1.41 |

Table 8.A. IRT *a*-values for Grade Five—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 324 | 0.63 | 0.23 | 0.18 | 1.38 |
| Claim 2 | 322 | 0.63 | 0.22 | 0.17 | 1.25 |
| Claim 3 | 171 | 0.53 | 0.15 | 0.21 | 0.99 |
| Claim 4 | 179 | 0.66 | 0.19 | 0.23 | 1.18 |
| **All Items** | 996 | 0.62 | 0.21 | 0.17 | 1.38 |

Table 8.A. IRT *a*-values for Grade Six—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 283 | 0.62 | 0.21 | 0.20 | 1.18 |
| Claim 2 | 326 | 0.60 | 0.22 | 0.17 | 1.35 |
| Claim 3 | 178 | 0.51 | 0.18 | 0.19 | 0.95 |
| Claim 4 | 194 | 0.59 | 0.20 | 0.17 | 1.22 |
| **All Items** | 981 | 0.59 | 0.21 | 0.17 | 1.35 |

Table 8.A. IRT *a*-values for Grade Seven—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 277 | 0.59 | 0.20 | 0.19 | 1.30 |
| Claim 2 | 324 | 0.58 | 0.22 | 0.17 | 1.65 |
| Claim 3 | 179 | 0.51 | 0.16 | 0.20 | 1.00 |
| Claim 4 | 150 | 0.57 | 0.20 | 0.16 | 1.00 |
| **All Items** | 930 | 0.57 | 0.20 | 0.16 | 1.65 |

Table 8.A. IRT *a*-values for Grade Eight—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 284 | 0.59 | 0.20 | 0.15 | 1.12 |
| Claim 2 | 354 | 0.54 | 0.18 | 0.15 | 1.07 |
| Claim 3 | 215 | 0.50 | 0.16 | 0.13 | 0.91 |
| Claim 4 | 152 | 0.58 | 0.20 | 0.20 | 1.19 |
| **All Items** | 1,005 | 0.55 | 0.19 | 0.13 | 1.19 |

Table 8.A. IRT *a*-values for Grade Eleven—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 905 | 0.55 | 0.18 | 0.13 | 1.16 |
| Claim 2 | 831 | 0.48 | 0.15 | 0.14 | 1.07 |
| Claim 3 | 607 | 0.45 | 0.16 | 0.10 | 0.98 |
| Claim 4 | 425 | 0.49 | 0.19 | 0.12 | 1.19 |
| **All Items** | 2,768 | 0.50 | 0.17 | 0.10 | 1.19 |

Table 8.A. IRT *a*-values for Grade Three—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 809 | 0.84 | 0.29 | 0.16 | 1.59 |
| Claim 2 | 283 | 0.90 | 0.28 | 0.20 | 1.51 |
| Claim 3 | 241 | 0.73 | 0.31 | 0.13 | 1.53 |
| **All Items** | 1,333 | 0.83 | 0.29 | 0.13 | 1.59 |

Table 8.A. IRT *a*-values for Grade Four—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 889 | 0.85 | 0.29 | 0.17 | 1.64 |
| Claim 2 | 323 | 0.80 | 0.29 | 0.20 | 1.63 |
| Claim 3 | 257 | 0.76 | 0.28 | 0.25 | 1.51 |
| **All Items** | 1,469 | 0.82 | 0.29 | 0.17 | 1.64 |

Table 8.A. IRT *a*-values for Grade Five—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 874 | 0.77 | 0.28 | 0.14 | 1.62 |
| Claim 2 | 303 | 0.80 | 0.30 | 0.16 | 1.56 |
| Claim 3 | 254 | 0.67 | 0.31 | 0.16 | 1.77 |
| **All Items** | 1,431 | 0.76 | 0.30 | 0.14 | 1.77 |

Table 8.A. IRT *a*-values for Grade Six—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 797 | 0.69 | 0.26 | 0.13 | 1.40 |
| Claim 2 | 239 | 0.77 | 0.26 | 0.15 | 1.71 |
| Claim 3 | 223 | 0.59 | 0.25 | 0.13 | 1.51 |
| **All Items** | 1,259 | 0.69 | 0.26 | 0.13 | 1.71 |

Table 8.A. IRT *a*-values for Grade Seven—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 721 | 0.73 | 0.28 | 0.10 | 1.49 |
| Claim 2 | 250 | 0.79 | 0.29 | 0.11 | 1.43 |
| Claim 3 | 177 | 0.61 | 0.33 | 0.12 | 1.68 |
| **All Items** | 1,148 | 0.73 | 0.30 | 0.10 | 1.68 |

Table 8.A. IRT *a*-values for Grade Eight—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 657 | 0.58 | 0.26 | 0.09 | 1.33 |
| Claim 2 | 186 | 0.71 | 0.28 | 0.16 | 1.40 |
| Claim 3 | 165 | 0.50 | 0.24 | 0.14 | 1.36 |
| **All Items** | 1,008 | 0.59 | 0.27 | 0.09 | 1.40 |

Table 8.A. IRT *a*-values for Grade Eleven—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 1,855 | 0.60 | 0.27 | 0.09 | 1.57 |
| Claim 2 | 396 | 0.58 | 0.27 | 0.10 | 1.40 |
| Claim 3 | 429 | 0.46 | 0.24 | 0.09 | 1.34 |
| **All Items** | 2,680 | 0.58 | 0.27 | 0.09 | 1.57 |

Table 8.A. IRT *b*-values for Grade Three—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 317 | -0.54 | 1.10 | -2.72 | 4.69 |
| Claim 2 | 275 | -0.80 | 1.02 | -2.90 | 4.12 |
| Claim 3 | 186 | -0.18 | 1.21 | -2.92 | 3.82 |
| Claim 4 | 157 | -0.26 | 0.97 | -2.22 | 1.86 |
| **All Items** | 935 | -0.50 | 1.10 | -2.92 | 4.69 |

Table 8.A. IRT *b*-values for Grade Four—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 279 | 0.16 | 1.30 | -2.60 | 6.23 |
| Claim 2 | 310 | -0.46 | 1.20 | -3.25 | 2.94 |
| Claim 3 | 204 | -0.00 | 1.31 | -2.82 | 4.25 |
| Claim 4 | 187 | 0.25 | 1.25 | -2.03 | 3.73 |
| **All Items** | 980 | -0.05 | 1.29 | -3.25 | 6.23 |

Table 8.A. IRT *b*-values for Grade Five—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 324 | 0.45 | 1.42 | -2.60 | 5.65 |
| Claim 2 | 322 | -0.22 | 1.30 | -3.25 | 3.29 |
| Claim 3 | 171 | 0.32 | 1.32 | -2.82 | 3.48 |
| Claim 4 | 179 | 0.30 | 1.17 | -2.03 | 3.83 |
| **All Items** | 996 | 0.18 | 1.35 | -3.25 | 5.65 |

Table 8.A. IRT *b*-values for Grade Six—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 283 | 0.96 | 1.32 | -2.10 | 4.78 |
| Claim 2 | 326 | 0.59 | 1.46 | -3.25 | 5.54 |
| Claim 3 | 178 | 0.64 | 1.56 | -2.82 | 7.38 |
| Claim 4 | 194 | 0.74 | 1.13 | -1.76 | 3.61 |
| **All Items** | 981 | 0.73 | 1.39 | -3.25 | 7.38 |

Table 8.A. IRT *b*-values for Grade Seven—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 277 | 1.24 | 1.46 | -1.84 | 6.63 |
| Claim 2 | 324 | 0.85 | 1.45 | -2.72 | 5.31 |
| Claim 3 | 179 | 0.72 | 1.36 | -1.71 | 5.88 |
| Claim 4 | 150 | 1.34 | 1.44 | -1.49 | 5.61 |
| **All Items** | 930 | 1.02 | 1.45 | -2.72 | 6.63 |

Table 8.A. IRT *b*-values for Grade Eight—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 284 | 1.49 | 1.41 | -1.84 | 6.42 |
| Claim 2 | 354 | 0.83 | 1.37 | -3.01 | 4.56 |
| Claim 3 | 215 | 0.77 | 1.29 | -2.12 | 3.87 |
| Claim 4 | 152 | 1.43 | 1.36 | -1.79 | 5.19 |
| **All Items** | 1,005 | 1.09 | 1.40 | -3.01 | 6.42 |

Table 8.A. IRT *b*-values for Grade Eleven—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 905 | 1.91 | 1.45 | -2.09 | 9.10 |
| Claim 2 | 831 | 1.64 | 1.45 | -1.98 | 9.15 |
| Claim 3 | 607 | 1.33 | 1.43 | -1.65 | 6.62 |
| Claim 4 | 425 | 1.97 | 1.41 | -1.20 | 8.94 |
| **All Items** | 2,768 | 1.71 | 1.46 | -2.09 | 9.15 |

Table 8.A. IRT *b*-values for Grade Three—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 809 | -1.13 | 1.07 | -4.34 | 4.16 |
| Claim 2 | 283 | -0.35 | 0.90 | -2.68 | 3.20 |
| Claim 3 | 241 | -0.13 | 1.05 | -2.42 | 5.12 |
| **All Items** | 1,333 | -0.78 | 1.12 | -4.34 | 5.12 |

Table 8.A. IRT *b*-values for Grade Four—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 889 | -0.36 | 1.13 | -3.38 | 4.48 |
| Claim 2 | 323 | 0.08 | 1.04 | -2.68 | 3.28 |
| Claim 3 | 257 | 0.30 | 1.02 | -2.08 | 5.18 |
| **All Items** | 1,469 | -0.15 | 1.13 | -3.38 | 5.18 |

Table 8.A. IRT *b*-values for Grade Five—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 874 | 0.15 | 1.15 | -3.38 | 6.20 |
| Claim 2 | 303 | 0.99 | 1.07 | -2.68 | 4.63 |
| Claim 3 | 254 | 0.88 | 1.19 | -2.01 | 5.98 |
| **All Items** | 1,431 | 0.46 | 1.20 | -3.38 | 6.20 |

Table 8.A. IRT *b*-values for Grade Six—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 797 | 0.76 | 1.39 | -3.93 | 9.16 |
| Claim 2 | 239 | 1.38 | 1.29 | -2.98 | 6.44 |
| Claim 3 | 223 | 1.79 | 1.59 | -2.16 | 8.75 |
| **All Items** | 1,259 | 1.06 | 1.47 | -3.93 | 9.16 |

Table 8.A. IRT *b*-values for Grade Seven—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 721 | 1.70 | 1.26 | -1.79 | 7.80 |
| Claim 2 | 250 | 1.87 | 1.06 | -1.09 | 5.07 |
| Claim 3 | 177 | 2.19 | 1.57 | -1.65 | 6.59 |
| **All Items** | 1,148 | 1.81 | 1.28 | -1.79 | 7.80 |

Table 8.A. IRT *b*-values for Grade Eight—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 657 | 1.98 | 1.69 | -1.87 | 7.75 |
| Claim 2 | 186 | 2.29 | 1.42 | -2.84 | 6.48 |
| Claim 3 | 165 | 2.82 | 1.87 | -1.65 | 9.02 |
| **All Items** | 1,008 | 2.18 | 1.70 | -2.84 | 9.02 |

Table 8.A. IRT *b*-values for Grade Eleven—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Claim** | **Number of Items** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Claim 1 | 1,855 | 2.35 | 1.49 | -4.43 | 8.72 |
| Claim 2 | 396 | 3.10 | 1.32 | -1.10 | 6.68 |
| Claim 3 | 429 | 3.03 | 1.54 | -1.05 | 9.25 |
| **All Items** | 2,680 | 2.57 | 1.51 | -4.43 | 9.25 |

**Note:** In table 8.A.29 through table 8.A.42, the mode of each distribution is in **bold** text and indicated using an asterisk.

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Three—ELA Non-‍PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2100–2199** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** |
| 0–< 0.2 | 5 | 5 | 5 | 5 | 5 | 5 |
| 0.2–< 0.4 | 99 | 100 | 102 | 104 | 105 | 104 |
| 0.4–< 0.6 | 237 | 247 | 250 | 252 | 252 | 247 |
| 0.6–< 0.8 | **\*266** | **\*273** | **\*275** | **\*277** | **\*275** | **\*274** |
| 0.8–< 1.0 | 143 | 149 | 149 | 150 | 150 | 149 |
| 1.0–< 1.2 | 57 | 60 | 61 | 61 | 61 | 60 |
| 1.2–< 1.4 | 7 | 7 | 7 | 7 | 7 | 7 |
| 1.4–< 1.6 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Four—ELA Non-PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2100–2199** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** |
| 0–< 0.2 | 9 | 11 | 11 | 11 | 11 | 11 |
| 0.2–< 0.4 | 150 | 163 | 165 | 164 | 164 | 161 |
| 0.4–< 0.6 | **\*258** | **\*281** | **\*282** | **\*287** | **\*287** | **\*285** |
| 0.6–< 0.8 | 236 | 262 | 267 | 268 | 262 | 252 |
| 0.8–< 1.0 | 88 | 96 | 100 | 101 | 95 | 91 |
| 1.0–< 1.2 | 26 | 29 | 29 | 29 | 24 | 22 |
| 1.2–< 1.4 | 2 | 2 | 2 | 3 | 3 | 2 |
| 1.4–< 1.6 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Five—ELA Non-PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| 0–< 0.2 | 3 | 3 | 3 | 3 | 3 | 3 |
| 0.2–< 0.4 | 128 | 129 | 129 | 130 | 124 | 123 |
| 0.4–< 0.6 | **\*292** | **\*302** | **\*303** | **\*310** | **\*302** | **\*300** |
| 0.6–< 0.8 | 241 | 244 | 244 | 241 | 227 | 221 |
| 0.8–< 1.0 | 111 | 114 | 116 | 111 | 109 | 104 |
| 1.0–< 1.2 | 27 | 27 | 27 | 27 | 22 | 21 |
| 1.2–< 1.4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 1.4–< 1.6 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Six—ELA Non-PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| 0–< 0.2 | 5 | 5 | 5 | 5 | 5 | 5 |
| 0.2–< 0.4 | 180 | 183 | 184 | 186 | 183 | 180 |
| 0.4–< 0.6 | **\*296** | **\*304** | **\*306** | **\*306** | **\*300** | **\*291** |
| 0.6–< 0.8 | 226 | 234 | 234 | 235 | 222 | 214 |
| 0.8–< 1.0 | 84 | 84 | 84 | 85 | 80 | 76 |
| 1.0–< 1.2 | 7 | 7 | 7 | 7 | 6 | 4 |
| 1.2–< 1.4 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1.4–< 1.6 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Seven—ELA Non-‍PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| 0–< 0.2 | 8 | 8 | 8 | 8 | 8 | 8 |
| 0.2–< 0.4 | 173 | 175 | 181 | 182 | 178 | 176 |
| 0.4–< 0.6 | **\*279** | **\*289** | **\*298** | **\*303** | **\*290** | **\*287** |
| 0.6–< 0.8 | 187 | 196 | 203 | 204 | 195 | 190 |
| 0.8–< 1.0 | 46 | 48 | 48 | 48 | 45 | 40 |
| 1.0–< 1.2 | 5 | 5 | 5 | 5 | 4 | 4 |
| 1.2–< 1.4 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1.4–< 1.6 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Eight—ELA Non-‍PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| 0–< 0.2 | 13 | 14 | 14 | 14 | 14 | 14 |
| 0.2–< 0.4 | 174 | 182 | 184 | 186 | 182 | 175 |
| 0.4–< 0.6 | **\*314** | **\*328** | **\*331** | **\*332** | **\*330** | **\*325** |
| 0.6–< 0.8 | 193 | 201 | 202 | 202 | 200 | 192 |
| 0.8–< 1.0 | 51 | 56 | 56 | 57 | 55 | 53 |
| 1.0–< 1.2 | 7 | 7 | 7 | 7 | 7 | 7 |
| 1.2–< 1.4 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.4–< 1.6 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Eleven—ELA Non-‍PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| 0–< 0.2 | 65 | 81 | 81 | 82 | 81 | 81 |
| 0.2–< 0.4 | 611 | 712 | 715 | 716 | 717 | 721 |
| 0.4–< 0.6 | **\*890** | **\*1,078** | **\*1,083** | **\*1,090** | **\*1,089** | **\*1,084** |
| 0.6–< 0.8 | 422 | 487 | 493 | 502 | 499 | 495 |
| 0.8–< 1.0 | 70 | 86 | 90 | 89 | 89 | 86 |
| 1.0–< 1.2 | 14 | 16 | 17 | 17 | 17 | 15 |
| 1.2–< 1.4 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.4–< 1.6 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Three—Mathematics Non-PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2100–2199** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** |
| 0–< 0.2 | 8 | 10 | 10 | 10 | 10 | 10 |
| 0.2–< 0.4 | 64 | 91 | 91 | 91 | 91 | 91 |
| 0.4–< 0.6 | 153 | 193 | 193 | 193 | 193 | 193 |
| 0.6–< 0.8 | 221 | 273 | 273 | 273 | 273 | 273 |
| 0.8–< 1.0 | **\*243** | **\*291** | **\*291** | **\*291** | **\*291** | **\*291** |
| 1.0–< 1.2 | 197 | 235 | 235 | 236 | 235 | 235 |
| 1.2–< 1.4 | 112 | 131 | 131 | 131 | 131 | 131 |
| 1.4–< 1.6 | 9 | 10 | 10 | 10 | 10 | 10 |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Four—Mathematics Non-PT Items

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** |
| 0–< 0.2 | 5 | 5 | 5 | 5 | 5 |
| 0.2–< 0.4 | 90 | 90 | 90 | 90 | 90 |
| 0.4–< 0.6 | 236 | 236 | 235 | 234 | 234 |
| 0.6–< 0.8 | **\*341** | **\*341** | **\*341** | **\*338** | **\*336** |
| 0.8–< 1.0 | 319 | 319 | 320 | 317 | 316 |
| 1.0–< 1.2 | 195 | 195 | 195 | 194 | 194 |
| 1.2–< 1.4 | 108 | 108 | 108 | 108 | 107 |
| 1.4–< 1.6 | 35 | 35 | 35 | 35 | 35 |
| 1.6–< 1.8 | 7 | 7 | 7 | 7 | 7 |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Five—Mathematics Non-PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| 0–< 0.2 | 19 | 19 | 19 | 19 | 19 | 19 |
| 0.2–< 0.4 | 129 | 130 | 130 | 130 | 130 | 130 |
| 0.4–< 0.6 | 285 | 286 | 285 | 284 | 283 | 282 |
| 0.6–< 0.8 | **\*331** | **\*332** | **\*332** | **\*315** | **\*309** | **\*310** |
| 0.8–< 1.0 | 261 | 262 | 260 | 255 | 250 | 251 |
| 1.0–< 1.2 | 158 | 159 | 158 | 159 | 157 | 157 |
| 1.2–< 1.4 | 92 | 92 | 92 | 91 | 91 | 91 |
| 1.4–< 1.6 | 25 | 25 | 25 | 25 | 25 | 25 |
| 1.6–< 1.8 | 2 | 2 | 2 | 2 | 2 | 2 |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Six—Mathematics Non-PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| 0–< 0.2 | 27 | 27 | 27 | 27 | 27 | 27 |
| 0.2–< 0.4 | 161 | 161 | 161 | 161 | 161 | 161 |
| 0.4–< 0.6 | 256 | 256 | 256 | 256 | 246 | 246 |
| 0.6–< 0.8 | **\*301** | **\*301** | **\*301** | **\*301** | **\*295** | **\*295** |
| 0.8–< 1.0 | 264 | 264 | 264 | 264 | 262 | 262 |
| 1.0–< 1.2 | 129 | 129 | 129 | 129 | 127 | 127 |
| 1.2–< 1.4 | 23 | 23 | 23 | 23 | 23 | 23 |
| 1.4–< 1.6 | 5 | 5 | 5 | 5 | 5 | 5 |
| 1.6–< 1.8 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Seven—Mathematics Non-PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| 0–< 0.2 | 30 | 30 | 30 | 30 | 30 | 30 |
| 0.2–< 0.4 | 166 | 166 | 166 | 166 | 166 | 166 |
| 0.4–< 0.6 | 182 | 182 | 182 | 182 | 181 | 181 |
| 0.6–< 0.8 | **\*247** | **\*247** | **\*247** | **\*247** | **\*243** | **\*242** |
| 0.8–< 1.0 | 229 | 229 | 229 | 229 | 227 | 226 |
| 1.0–< 1.2 | 161 | 161 | 161 | 161 | 161 | 161 |
| 1.2–< 1.4 | 37 | 37 | 37 | 37 | 37 | 37 |
| 1.4–< 1.6 | 4 | 4 | 4 | 4 | 4 | 4 |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Eight—Mathematics Non-PT Items

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** | **2800–2899** |
| 0–< 0.2 | 49 | 49 | 49 | 49 | 49 | 49 | 49 |
| 0.2–< 0.4 | 220 | 220 | 220 | 220 | 220 | 220 | 220 |
| 0.4–< 0.6 | **\*245** | **\*245** | **\*245** | **\*245** | **\*244** | **\*242** | **\*242** |
| 0.6–< 0.8 | 225 | 225 | 225 | 225 | 225 | 220 | 219 |
| 0.8–< 1.0 | 133 | 133 | 133 | 133 | 133 | 130 | 129 |
| 1.0–< 1.2 | 47 | 47 | 47 | 47 | 47 | 47 | 47 |
| 1.2–< 1.4 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 1.4–< 1.6 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Eleven—Mathematics Non-PT Items

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** | **2800–2899** |
| 0–< 0.2 | 184 | 186 | 186 | 186 | 186 | 186 | 186 |
| 0.2–< 0.4 | 595 | 598 | 598 | 598 | 598 | 598 | 598 |
| 0.4–< 0.6 | **\*652** | **\*655** | **\*655** | **\*655** | **\*655** | **\*655** | **\*655** |
| 0.6–< 0.8 | 582 | 586 | 587 | 587 | 587 | 587 | 587 |
| 0.8–< 1.0 | 408 | 413 | 413 | 413 | 413 | 413 | 413 |
| 1.0–< 1.2 | 139 | 141 | 141 | 141 | 141 | 141 | 141 |
| 1.2–< 1.4 | 22 | 22 | 22 | 22 | 22 | 22 | 22 |
| 1.4–< 1.6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

**Note:** In table 8.A.43 through table 8.A.56, the mode of each distribution is in **bold** text and indicated using an asterisk.

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Three—ELA Non-‍PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2100–2199** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.0–< -2.5 | 7 | 7 | 7 | 7 | 7 | 7 |
| -2.5–< -2.0 | 45 | 45 | 45 | 44 | 44 | 44 |
| -2.0–< -1.5 | 127 | 129 | 129 | 129 | 128 | 127 |
| -1.5–< -1.0 | **\*136** | **\*142** | **\*142** | **\*144** | **\*144** | **\*141** |
| -1.0–< -0.5 | 129 | 134 | 136 | 138 | 136 | 132 |
| -0.5–< 0 | 130 | 133 | 134 | 135 | 135 | 134 |
| 0–< 0.5 | 99 | 105 | 107 | 109 | 109 | 108 |
| 0.5–< 1.0 | 76 | 79 | 79 | 79 | 79 | 79 |
| 1.0–< 1.5 | 36 | 37 | 39 | 40 | 42 | 42 |
| 1.5–< 2.0 | 16 | 17 | 18 | 18 | 18 | 18 |
| 2.0–< 2.5 | 8 | 8 | 8 | 8 | 8 | 8 |
| 2.5–< 3.0 | 3 | 3 | 3 | 3 | 3 | 3 |
| 3.0–< 3.5 | 1 | 1 | 1 | 1 | 1 | 1 |
| > = 3.5 | 2 | 2 | 2 | 2 | 2 | 3 |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Four—ELA Non-‍PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2100–2199** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | 1 | 1 | 1 | 1 | 1 | 1 |
| -3.0–< -2.5 | 7 | 7 | 7 | 7 | 4 | 4 |
| -2.5–< -2.0 | 34 | 38 | 38 | 33 | 26 | 24 |
| -2.0–< -1.5 | 62 | 64 | 65 | 65 | 60 | 53 |
| -1.5–< -1.0 | 95 | 108 | 110 | 110 | 108 | 105 |
| -1.0–< -0.5 | 111 | 120 | 122 | 122 | 120 | 118 |
| -0.5–< 0 | 104 | 114 | 116 | 121 | 122 | 115 |
| 0–< 0.5 | **\*116** | **\*124** | **\*124** | **\*125** | **\*125** | **\*124** |
| 0.5–< 1.0 | 78 | 84 | 86 | 90 | 90 | 90 |
| 1.0–< 1.5 | 65 | 75 | 76 | 78 | 78 | 78 |
| 1.5–< 2.0 | 41 | 48 | 50 | 50 | 51 | 51 |
| 2.0–< 2.5 | 27 | 30 | 30 | 30 | 30 | 30 |
| 2.5–< 3.0 | 16 | 18 | 18 | 18 | 18 | 18 |
| 3.0–< 3.5 | 6 | 7 | 7 | 7 | 7 | 7 |
| > = 3.5 | 7 | 7 | 7 | 7 | 7 | 7 |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Five—ELA Non-‍PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | 1 | 1 | 1 | 1 | N/A | N/A |
| -3.0–< -2.5 | 3 | 3 | 3 | 2 | N/A | N/A |
| -2.5–< -2.0 | 19 | 20 | 19 | 15 | 10 | 10 |
| -2.0–< -1.5 | 40 | 40 | 40 | 34 | 27 | 24 |
| -1.5–< -1.0 | 88 | 90 | 89 | 88 | 81 | 77 |
| -1.0–< -0.5 | 109 | 110 | 111 | 110 | 104 | 104 |
| -0.5–< 0 | 110 | 110 | 110 | 111 | 111 | 109 |
| 0–< 0.5 | 94 | 97 | 99 | 100 | 95 | 94 |
| 0.5–< 1.0 | **\*112** | **\*112** | **\*113** | **\*115** | **\*113** | **\*111** |
| 1.0–< 1.5 | 86 | 87 | 88 | 91 | 91 | 90 |
| 1.5–< 2.0 | 58 | 60 | 60 | 64 | 64 | 62 |
| 2.0–< 2.5 | 48 | 52 | 52 | 53 | 53 | 53 |
| 2.5–< 3.0 | 19 | 21 | 21 | 22 | 22 | 22 |
| 3.0–< 3.5 | 8 | 8 | 8 | 8 | 8 | 8 |
| > = 3.5 | 11 | 12 | 12 | 12 | 12 | 12 |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Six—ELA Non-‍PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | 1 | 1 | 1 | N/A | N/A | N/A |
| -3.0–< -2.5 | 2 | 2 | 2 | 2 | 2 | 1 |
| -2.5–< -2.0 | 8 | 8 | 7 | 5 | 3 | N/A |
| -2.0–< -1.5 | 14 | 14 | 14 | 14 | 10 | 6 |
| -1.5–< -1.0 | 56 | 57 | 57 | 57 | 47 | 36 |
| -1.0–< -0.5 | 77 | 81 | 81 | 81 | 75 | 72 |
| -0.5–< 0 | 92 | 96 | 95 | 95 | 92 | 91 |
| 0–< 0.5 | 92 | 93 | 92 | 93 | 91 | 91 |
| 0.5–< 1.0 | 111 | 112 | **\*116** | **\*117** | **\*116** | 113 |
| 1.0–< 1.5 | **\*114** | **\*115** | 115 | 115 | 115 | **\*115** |
| 1.5–< 2.0 | 85 | 89 | 90 | 92 | 92 | 92 |
| 2.0–< 2.5 | 62 | 62 | 63 | 64 | 64 | 64 |
| 2.5–< 3.0 | 39 | 41 | 41 | 42 | 42 | 42 |
| 3.0–< 3.5 | 20 | 20 | 20 | 21 | 21 | 21 |
| > = 3.5 | 26 | 27 | 27 | 27 | 27 | 27 |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Seven—ELA Non-‍PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.0–< -2.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.5–< -2.0 | 3 | 3 | 3 | 3 | 1 | 1 |
| -2.0–< -1.5 | 12 | 12 | 12 | 12 | 8 | 7 |
| -1.5–< -1.0 | 41 | 42 | 43 | 42 | 30 | 23 |
| -1.0–< -0.5 | 41 | 45 | 46 | 46 | 41 | 39 |
| -0.5–< 0 | 82 | 84 | 86 | 85 | 81 | 77 |
| 0–< 0.5 | 84 | 85 | 86 | 87 | 84 | 84 |
| 0.5–< 1.0 | 78 | 79 | 82 | 83 | 79 | 77 |
| 1.0–< 1.5 | **\*103** | **\*105** | **\*110** | **\*111** | **\*110** | **\*110** |
| 1.5–< 2.0 | 90 | 95 | 99 | 101 | 103 | 103 |
| 2.0–< 2.5 | 58 | 62 | 64 | 67 | 68 | 68 |
| 2.5–< 3.0 | 36 | 37 | 39 | 40 | 40 | 40 |
| 3.0–< 3.5 | 25 | 27 | 27 | 27 | 28 | 28 |
| > = 3.5 | 46 | 46 | 47 | 47 | 48 | 49 |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Eight—ELA Non-‍PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | 1 | 1 | 1 | 1 | 1 | 1 |
| -3.0–< -2.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.5–< -2.0 | 3 | 3 | 3 | 3 | 3 | 3 |
| -2.0–< -1.5 | 8 | 8 | 8 | 8 | 5 | 5 |
| -1.5–< -1.0 | 25 | 27 | 27 | 27 | 20 | 13 |
| -1.0–< -0.5 | 42 | 44 | 44 | 43 | 41 | 38 |
| -0.5–< 0 | 100 | 108 | 109 | 109 | 107 | 99 |
| 0–< 0.5 | 84 | 85 | 86 | 86 | 86 | 84 |
| 0.5–< 1.0 | 91 | 93 | 95 | 97 | 97 | 94 |
| 1.0–< 1.5 | 93 | 98 | 98 | 99 | 99 | 98 |
| 1.5–< 2.0 | **\*109** | **\*110** | **\*110** | **\*112** | **\*112** | **\*112** |
| 2.0–< 2.5 | 73 | 76 | 76 | 76 | 79 | 79 |
| 2.5–< 3.0 | 51 | 58 | 58 | 58 | 58 | 59 |
| 3.0–< 3.5 | 33 | 36 | 36 | 36 | 36 | 37 |
| > = 3.5 | 39 | 41 | 43 | 43 | 44 | 44 |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Eleven—ELA Non-‍PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.0–< -2.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.5–< -2.0 | 1 | 1 | 1 | 1 | 1 | 1 |
| -2.0–< -1.5 | 7 | 8 | 8 | 8 | 8 | 7 |
| -1.5–< -1.0 | 17 | 21 | 20 | 20 | 19 | 19 |
| -1.0–< -0.5 | 78 | 90 | 90 | 88 | 89 | 85 |
| -0.5–< 0 | 150 | 174 | 177 | 177 | 172 | 168 |
| 0–< 0.5 | 200 | 225 | 226 | 229 | 226 | 225 |
| 0.5–< 1.0 | 260 | 299 | 302 | 304 | 303 | 298 |
| 1.0–< 1.5 | 249 | 299 | 299 | 301 | 298 | 298 |
| 1.5–< 2.0 | **\*312** | **\*373** | **\*374** | **\*375** | **\*375** | **\*374** |
| 2.0–< 2.5 | 268 | 314 | 321 | 325 | 328 | 330 |
| 2.5–< 3.0 | 184 | 229 | 231 | 234 | 234 | 233 |
| 3.0–< 3.5 | 132 | 173 | 173 | 172 | 175 | 175 |
| > = 3.5 | 214 | 254 | 257 | 262 | 264 | 269 |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Three—Mathematics Non-PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2100–2199** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** |
| < -3.5 | 3 | 3 | 3 | 3 | 3 | 3 |
| -3.5–< -3.0 | 15 | 15 | 15 | 15 | 15 | 15 |
| -3.0–< -2.5 | 49 | 49 | 49 | 49 | 49 | 49 |
| -2.5–< -2.0 | 97 | 102 | 102 | 102 | 102 | 102 |
| -2.0–< -1.5 | **\*180** | **\*204** | **\*204** | **\*205** | **\*204** | **\*204** |
| -1.5–< -1.0 | 155 | 179 | 179 | 179 | 179 | 179 |
| -1.0–< -0.5 | 138 | 192 | 192 | 192 | 192 | 192 |
| -0.5–< 0 | 148 | 192 | 192 | 192 | 192 | 192 |
| 0–< 0.5 | 110 | 148 | 148 | 148 | 148 | 148 |
| 0.5–< 1.0 | 69 | 89 | 89 | 89 | 89 | 89 |
| 1.0–< 1.5 | 26 | 30 | 30 | 30 | 30 | 30 |
| 1.5–< 2.0 | 9 | 14 | 14 | 14 | 14 | 14 |
| 2.0–< 2.5 | 2 | 6 | 6 | 6 | 6 | 6 |
| 2.5–< 3.0 | 3 | 3 | 3 | 3 | 3 | 3 |
| 3.0–< 3.5 | 2 | 5 | 5 | 5 | 5 | 5 |
| > = 3.5 | 1 | 3 | 3 | 3 | 3 | 3 |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Four—Mathematics Non-PT Items

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | 3 | 3 | 3 | 3 | 3 |
| -3.0–< -2.5 | 17 | 17 | 16 | 12 | 10 |
| -2.5–< -2.0 | 42 | 42 | 42 | 39 | 37 |
| -2.0–< -1.5 | 74 | 74 | 75 | 74 | 74 |
| -1.5–< -1.0 | 140 | 140 | 140 | 140 | 140 |
| -1.0–< -0.5 | 192 | 192 | 192 | 192 | 192 |
| -0.5–< 0 | **\*281** | **\*281** | **\*281** | **\*281** | **\*281** |
| 0–< 0.5 | 223 | 223 | 223 | 223 | 223 |
| 0.5–< 1.0 | 180 | 180 | 180 | 180 | 180 |
| 1.0–< 1.5 | 95 | 95 | 95 | 95 | 95 |
| 1.5–< 2.0 | 46 | 46 | 46 | 46 | 46 |
| 2.0–< 2.5 | 25 | 25 | 25 | 25 | 25 |
| 2.5–< 3.0 | 8 | 8 | 8 | 8 | 8 |
| 3.0–< 3.5 | 4 | 4 | 4 | 4 | 4 |
| > = 3.5 | 6 | 6 | 6 | 6 | 6 |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Five—Mathematics Non-PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | 2 | 2 | 2 | 1 | N/A | N/A |
| -3.0–< -2.5 | 12 | 13 | 12 | 6 | 5 | 5 |
| -2.5–< -2.0 | 23 | 25 | 24 | 14 | 8 | 8 |
| -2.0–< -1.5 | 30 | 30 | 29 | 22 | 17 | 18 |
| -1.5–< -1.0 | 42 | 42 | 42 | 42 | 42 | 42 |
| -1.0–< -0.5 | 111 | 111 | 111 | 111 | 111 | 111 |
| -0.5–< 0 | 179 | 179 | 179 | 179 | 179 | 179 |
| 0–< 0.5 | **\*286** | **\*287** | **\*286** | **\*287** | **\*286** | **\*286** |
| 0.5–< 1.0 | 223 | 223 | 223 | 223 | 223 | 223 |
| 1.0–< 1.5 | 163 | 163 | 163 | 163 | 163 | 163 |
| 1.5–< 2.0 | 130 | 131 | 131 | 131 | 131 | 131 |
| 2.0–< 2.5 | 58 | 58 | 58 | 58 | 58 | 58 |
| 2.5–< 3.0 | 24 | 24 | 24 | 24 | 24 | 24 |
| 3.0–< 3.5 | 8 | 8 | 8 | 8 | 8 | 8 |
| >= 3.5 | 11 | 11 | 11 | 11 | 11 | 11 |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Six—Mathematics Non-PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| < -3.5 | 1 | 1 | 1 | 1 | 1 | 1 |
| -3.5–< -3.0 | 1 | 1 | 1 | 1 | N/A | N/A |
| -3.0–< -2.5 | 7 | 7 | 7 | 7 | 5 | 5 |
| -2.5–< -2.0 | 17 | 17 | 17 | 17 | 7 | 7 |
| -2.0–< -1.5 | 33 | 33 | 33 | 33 | 27 | 27 |
| -1.5–< -1.0 | 33 | 33 | 33 | 33 | 32 | 32 |
| -1.0–< -0.5 | 63 | 63 | 63 | 63 | 63 | 63 |
| -0.5–< 0 | 78 | 78 | 78 | 78 | 78 | 78 |
| 0–< 0.5 | 120 | 120 | 120 | 120 | 120 | 120 |
| 0.5–< 1.0 | 186 | 186 | 186 | 186 | 186 | 186 |
| 1.0–< 1.5 | **\*193** | **\*193** | **\*193** | **\*193** | **\*193** | **\*193** |
| 1.5–< 2.0 | 167 | 167 | 167 | 167 | 167 | 167 |
| 2.0–< 2.5 | 125 | 125 | 125 | 125 | 125 | 125 |
| 2.5–< 3.0 | 59 | 59 | 59 | 59 | 59 | 59 |
| 3.0–< 3.5 | 34 | 34 | 34 | 34 | 34 | 34 |
| > = 3.5 | 50 | 50 | 50 | 50 | 50 | 50 |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Seven—Mathematics Non-PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.0–< -2.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.5–< -2.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.0–< -1.5 | 11 | 11 | 11 | 11 | 7 | 7 |
| -1.5–< -1.0 | 13 | 13 | 13 | 13 | 10 | 9 |
| -1.0–< -0.5 | 19 | 19 | 19 | 19 | 19 | 18 |
| -0.5–< 0 | 33 | 33 | 33 | 33 | 33 | 33 |
| 0–< 0.5 | 55 | 55 | 55 | 55 | 55 | 55 |
| 0.5–< 1.0 | 97 | 97 | 97 | 97 | 97 | 97 |
| 1.0–< 1.5 | 168 | 168 | 168 | 168 | 168 | 168 |
| 1.5–< 2.0 | **\*198** | **\*198** | **\*198** | **\*198** | **\*198** | **\*198** |
| 2.0–< 2.5 | 175 | 175 | 175 | 175 | 175 | 175 |
| 2.5–< 3.0 | 143 | 143 | 143 | 143 | 143 | 143 |
| 3.0–< 3.5 | 63 | 63 | 63 | 63 | 63 | 63 |
| > = 3.5 | 81 | 81 | 81 | 81 | 81 | 81 |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Eight—Mathematics Non-PT Items

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** | **2800–2899** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.0–< -2.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.5–< -2.0 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.0–< -1.5 | 10 | 10 | 10 | 10 | 9 | 5 | 5 |
| -1.5–< -1.0 | 17 | 17 | 17 | 17 | 17 | 13 | 12 |
| -1.0–< -0.5 | 37 | 37 | 37 | 37 | 37 | 35 | 34 |
| -0.5–< 0 | 35 | 35 | 35 | 35 | 35 | 35 | 35 |
| 0–< 0.5 | 55 | 55 | 55 | 55 | 55 | 55 | 55 |
| 0.5–< 1.0 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| 1.0–< 1.5 | 84 | 84 | 84 | 84 | 84 | 84 | 84 |
| 1.5–< 2.0 | 106 | 106 | 106 | 106 | 106 | 106 | 106 |
| 2.0–< 2.5 | 130 | 130 | 130 | 130 | 130 | 130 | 130 |
| 2.5–< 3.0 | 114 | 114 | 114 | 114 | 114 | 114 | 114 |
| 3.0–< 3.5 | 101 | 101 | 101 | 101 | 101 | 101 | 101 |
| > = 3.5 | **\*189** | **\*189** | **\*189** | **\*189** | **\*189** | **\*189** | **\*189** |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Eleven—Mathematics Non-PT Items

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** | **2800–2899** |
| < -3.5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -3.5–< -3.0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| -3.0–< -2.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.5–< -2.0 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| -2.0–< -1.5 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| -1.5–< -1.0 | 23 | 23 | 23 | 23 | 23 | 23 | 23 |
| -1.0–< -0.5 | 36 | 36 | 36 | 36 | 36 | 36 | 36 |
| -0.5–< 0 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| 0–< 0.5 | 102 | 102 | 102 | 102 | 102 | 102 | 102 |
| 0.5–< 1.0 | 143 | 143 | 143 | 143 | 143 | 143 | 143 |
| 1.0–< 1.5 | 201 | 202 | 202 | 202 | 202 | 202 | 202 |
| 1.5–< 2.0 | 281 | 283 | 283 | 283 | 283 | 283 | 283 |
| 2.0–< 2.5 | 350 | 352 | 352 | 352 | 352 | 352 | 352 |
| 2.5–< 3.0 | 381 | 387 | 387 | 387 | 387 | 387 | 387 |
| 3.0–< 3.5 | 343 | 348 | 348 | 348 | 348 | 348 | 348 |
| > = 3.5 | **\*659** | **\*662** | **\*663** | **\*663** | **\*663** | **\*663** | **\*663** |

**Note:** In table 8.A.57 through table 8.A.70, the mode of each distribution is in **bold** text and indicated using an asterisk.

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Three—ELA PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2100–2199** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** |
| 0–< 0.2 | N/A | N/A | N/A | N/A | N/A | N/A |
| 0.2–< 0.4 | 5 | 5 | 5 | 5 | 5 | 5 |
| 0.4–< 0.6 | 17 | 17 | 17 | 17 | 17 | 17 |
| 0.6–< 0.8 | **\*21** | **\*21** | **\*21** | **\*21** | **\*21** | **\*21** |
| 0.8–< 1.0 | 10 | 10 | 10 | 10 | 10 | 10 |
| 1.0–< 1.2 | 4 | 4 | 4 | 4 | 4 | 4 |
| 1.2–< 1.4 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.4–< 1.6 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Four—ELA PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2100–2199** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** |
| 0–< 0.2 | N/A | N/A | N/A | N/A | N/A | N/A |
| 0.2–< 0.4 | 3 | 3 | 3 | 3 | 3 | 3 |
| 0.4–< 0.6 | **\*30** | **\*30** | **\*30** | **\*30** | **\*30** | **\*30** |
| 0.6–< 0.8 | 17 | 17 | 17 | 17 | 17 | 17 |
| 0.8–< 1.0 | 15 | 15 | 15 | 15 | 15 | 15 |
| 1.0–< 1.2 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1.2–< 1.4 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.4–< 1.6 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Five—ELA PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| 0–< 0.2 | N/A | N/A | N/A | N/A | N/A | N/A |
| 0.2–< 0.4 | 8 | 8 | 8 | 8 | 8 | 8 |
| 0.4–< 0.6 | 22 | 22 | 22 | 22 | 22 | 22 |
| 0.6–< 0.8 | **\*23** | **\*23** | **\*23** | **\*23** | **\*23** | **\*23** |
| 0.8–< 1.0 | 15 | 15 | 15 | 15 | 15 | 15 |
| 1.0–< 1.2 | 6 | 6 | 6 | 6 | 6 | 6 |
| 1.2–< 1.4 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1.4–< 1.6 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Six—ELA PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| 0–< 0.2 | N/A | N/A | N/A | N/A | N/A | N/A |
| 0.2–< 0.4 | 2 | 2 | 2 | 2 | 2 | 2 |
| 0.4–< 0.6 | 13 | 13 | 13 | 13 | 13 | 13 |
| 0.6–< 0.8 | **\*14** | **\*14** | **\*14** | **\*14** | **\*14** | **\*14** |
| 0.8–< 1.0 | 13 | 13 | 13 | 13 | 13 | 13 |
| 1.0–< 1.2 | 11 | 11 | 11 | 11 | 11 | 11 |
| 1.2–< 1.4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 1.4–< 1.6 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Seven—ELA PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| 0–< 0.2 | N/A | N/A | N/A | N/A | N/A | N/A |
| 0.2–< 0.4 | N/A | N/A | N/A | N/A | N/A | N/A |
| 0.4–< 0.6 | 13 | 13 | 13 | 13 | 13 | 13 |
| 0.6–< 0.8 | 21 | 21 | 21 | 21 | 21 | 21 |
| 0.8–< 1.0 | **\*27** | **\*27** | **\*27** | **\*27** | **\*27** | **\*27** |
| 1.0–< 1.2 | 4 | 4 | 4 | 4 | 4 | 4 |
| 1.2–< 1.4 | 5 | 5 | 5 | 5 | 5 | 5 |
| 1.4–< 1.6 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1.6–< 1.8 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Eight—ELA PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| 0–< 0.2 | N/A | N/A | N/A | N/A | N/A | N/A |
| 0.2–< 0.4 | 11 | 11 | 11 | 11 | 11 | 11 |
| 0.4–< 0.6 | 9 | 9 | 9 | 9 | 9 | 9 |
| 0.6–< 0.8 | **\*28** | **\*28** | **\*28** | **\*28** | **\*28** | **\*28** |
| 0.8–< 1.0 | 24 | 24 | 24 | 24 | 24 | 24 |
| 1.0–< 1.2 | 3 | 3 | 3 | 3 | 3 | 3 |
| 1.2–< 1.4 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.4–< 1.6 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Eleven—ELA PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| 0–< 0.2 | N/A | N/A | N/A | N/A | N/A | N/A |
| 0.2–< 0.4 | 2 | 2 | 2 | 2 | 2 | 2 |
| 0.4–< 0.6 | **\*42** | **\*42** | **\*42** | **\*42** | **\*42** | **\*42** |
| 0.6–< 0.8 | 38 | 38 | 38 | 38 | 38 | 38 |
| 0.8–< 1.0 | 2 | 2 | 2 | 2 | 2 | 2 |
| 1.0–< 1.2 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.2–< 1.4 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.4–< 1.6 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Three—Mathematics PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2100–2199** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** |
| 0–< 0.2 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0.2–< 0.4 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0.4–< 0.6 | 14 | 14 | 14 | 14 | 14 | 14 |
| 0.6–< 0.8 | 19 | 19 | 19 | 19 | 19 | 19 |
| 0.8–< 1.0 | 22 | 22 | 22 | 22 | 22 | 22 |
| 1.0–< 1.2 | **\*28** | **\*28** | **\*28** | **\*28** | **\*28** | **\*28** |
| 1.2–< 1.4 | 7 | 7 | 7 | 7 | 7 | 7 |
| 1.4–< 1.6 | 3 | 3 | 3 | 3 | 3 | 3 |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Four—Mathematics PT Items

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** |
| 0–< 0.2 | N/A | N/A | N/A | N/A | N/A |
| 0.2–< 0.4 | N/A | N/A | N/A | N/A | N/A |
| 0.4–< 0.6 | 9 | 9 | 9 | 9 | 9 |
| 0.6–< 0.8 | **\*47** | **\*47** | **\*47** | **\*47** | **\*47** |
| 0.8–< 1.0 | 32 | 32 | 32 | 32 | 32 |
| 1.0–< 1.2 | 18 | 18 | 18 | 18 | 18 |
| 1.2–< 1.4 | 8 | 8 | 8 | 8 | 8 |
| 1.4–< 1.6 | 2 | 2 | 2 | 2 | 2 |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Five—Mathematics PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| 0–< 0.2 | N/A | N/A | N/A | N/A | N/A | N/A |
| 0.2–< 0.4 | 8 | 8 | 8 | 8 | 8 | 8 |
| 0.4–< 0.6 | 23 | 23 | 23 | 23 | 23 | 23 |
| 0.6–< 0.8 | **\*35** | **\*35** | **\*35** | **\*35** | **\*35** | **\*35** |
| 0.8–< 1.0 | 24 | 24 | 24 | 24 | 24 | 24 |
| 1.0–< 1.2 | 9 | 9 | 9 | 9 | 9 | 9 |
| 1.2–< 1.4 | 6 | 6 | 6 | 6 | 6 | 6 |
| 1.4–< 1.6 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Six—Mathematics PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| 0–< 0.2 | N/A | N/A | N/A | N/A | N/A | N/A |
| 0.2–< 0.4 | N/A | N/A | N/A | N/A | N/A | N/A |
| 0.4–< 0.6 | 25 | 25 | 25 | 25 | 25 | 25 |
| 0.6–< 0.8 | **\*45** | **\*45** | **\*45** | **\*45** | **\*45** | **\*45** |
| 0.8–< 1.0 | 14 | 14 | 14 | 14 | 14 | 14 |
| 1.0–< 1.2 | 7 | 7 | 7 | 7 | 7 | 7 |
| 1.2–< 1.4 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1.4–< 1.6 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Seven—Mathematics PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| 0–< 0.2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 0.2–< 0.4 | 6 | 6 | 6 | 6 | 6 | 6 |
| 0.4–< 0.6 | 8 | 8 | 8 | 8 | 8 | 8 |
| 0.6–< 0.8 | **\*25** | **\*25** | **\*25** | **\*25** | **\*25** | **\*25** |
| 0.8–< 1.0 | 23 | 23 | 23 | 23 | 23 | 23 |
| 1.0–< 1.2 | 17 | 17 | 17 | 17 | 17 | 17 |
| 1.2–< 1.4 | 7 | 7 | 7 | 7 | 7 | 7 |
| 1.4–< 1.6 | 3 | 3 | 3 | 3 | 3 | 3 |
| 1.6–< 1.8 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Eight—Mathematics PT Items

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** | **2800–2899** |
| 0–< 0.2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 0.2–< 0.4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 0.4–< 0.6 | **\*22** | **\*22** | **\*22** | **\*22** | **\*22** | **\*22** | **\*22** |
| 0.6–< 0.8 | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| 0.8–< 1.0 | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| 1.0–< 1.2 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| 1.2–< 1.4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 1.4–< 1.6 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *a*-values Conditional on Ability for Grade Eleven—Mathematics PT Items

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **IRT *a*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** | **2800–2899** |
| 0–< 0.2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 0.2–< 0.4 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| 0.4–< 0.6 | **\*20** | **\*20** | **\*20** | **\*20** | **\*20** | **\*20** | **\*20** |
| 0.6–< 0.8 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| 0.8–< 1.0 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| 1.0–< 1.2 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 1.2–< 1.4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1.4–< 1.6 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.6–< 1.8 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.8–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

**Note:** In table 8.A.71 through table 8.A.84, the mode of each distribution is in **bold** text and indicated using an asterisk.

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Three—ELA PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2100–2199** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.0–< -2.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.5–< -2.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.0–< -1.5 | 1 | 1 | 1 | 1 | 1 | 1 |
| -1.5–< -1.0 | 7 | 7 | 7 | 7 | 7 | 7 |
| -1.0–< -0.5 | **\*14** | **\*14** | **\*14** | **\*14** | **\*14** | **\*14** |
| -0.5–< 0 | 9 | 9 | 9 | 9 | 9 | 9 |
| 0–< 0.5 | **\*14** | **\*14** | **\*14** | **\*14** | **\*14** | **\*14** |
| 0.5–< 1.0 | 8 | 8 | 8 | 8 | 8 | 8 |
| 1.0–< 1.5 | 2 | 2 | 2 | 2 | 2 | 2 |
| 1.5–< 2.0 | 2 | 2 | 2 | 2 | 2 | 2 |
| 2.0–< 2.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| 2.5–< 3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| 3.0–< 3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| > = 3.5 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Four—ELA PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2100–2199** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5 –< -3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.0 –< -2.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.5 –< -2.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.0 –< -1.5 | 2 | 2 | 2 | 2 | 2 | 2 |
| -1.5 –< -1.0 | 1 | 1 | 1 | 1 | 1 | 1 |
| -1.0 –< -0.5 | 3 | 3 | 3 | 3 | 3 | 3 |
| -0.5–< 0 | **\*26** | **\*26** | **\*26** | **\*26** | **\*26** | **\*26** |
| 0–< 0.5 | 16 | 16 | 16 | 16 | 16 | 16 |
| 0.5–< 1.0 | 12 | 12 | 12 | 12 | 12 | 12 |
| 1.0–< 1.5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 1.5–< 2.0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2.0–< 2.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| 2.5–< 3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| 3.0–< 3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| > = 3.5 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Five—ELA PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.0–< -2.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.5–< -2.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.0–< -1.5 | 1 | 1 | 1 | 1 | 1 | 1 |
| -1.5–< -1.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -1.0–< -0.5 | 4 | 4 | 4 | 4 | 4 | 4 |
| -0.5–< 0 | 20 | 20 | 20 | 20 | 20 | 20 |
| 0–< 0.5 | **\*28** | **\*28** | **\*28** | **\*28** | **\*28** | **\*28** |
| 0.5–< 1.0 | 10 | 10 | 10 | 10 | 10 | 10 |
| 1.0–< 1.5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 1.5–< 2.0 | 7 | 7 | 7 | 7 | 7 | 7 |
| 2.0–< 2.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| 2.5–< 3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| 3.0–< 3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| > = 3.5 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Six—ELA PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.0–< -2.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.5–< -2.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.0–< -1.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -1.5–< -1.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -1.0–< -0.5 | 3 | 3 | 3 | 3 | 3 | 3 |
| -0.5–< 0 | **\*15** | **\*15** | **\*15** | **\*15** | **\*15** | **\*15** |
| 0–< 0.5 | 8 | 8 | 8 | 8 | 8 | 8 |
| 0.5–< 1.0 | 12 | 12 | 12 | 12 | 12 | 12 |
| 1.0–< 1.5 | 13 | 13 | 13 | 13 | 13 | 13 |
| 1.5–< 2.0 | 6 | 6 | 6 | 6 | 6 | 6 |
| 2.0–< 2.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| 2.5–< 3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| 3.0–< 3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| > = 3.5 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Seven—ELA PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5 –< -3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.0 –< -2.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.5 –< -2.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.0 –< -1.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -1.5 –< -1.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -1.0 –< -0.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -0.5–< 0 | 9 | 9 | 9 | 9 | 9 | 9 |
| 0–< 0.5 | 12 | 12 | 12 | 12 | 12 | 12 |
| 0.5–< 1.0 | **\*20** | **\*20** | **\*20** | **\*20** | **\*20** | **\*20** |
| 1.0–< 1.5 | 19 | 19 | 19 | 19 | 19 | 19 |
| 1.5–< 2.0 | 7 | 7 | 7 | 7 | 7 | 7 |
| 2.0–< 2.5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 2.5–< 3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| 3.0–< 3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| * = 3.5 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Eight—ELA PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.0–< -2.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.5–< -2.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.0–< -1.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -1.5–< -1.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -1.0–< -0.5 | 1 | 1 | 1 | 1 | 1 | 1 |
| -0.5–< 0 | 19 | 19 | 19 | 19 | 19 | 19 |
| 0–< 0.5 | 6 | 6 | 6 | 6 | 6 | 6 |
| 0.5–< 1.0 | 9 | 9 | 9 | 9 | 9 | 9 |
| 1.0–< 1.5 | **\*22** | **\*22** | **\*22** | **\*22** | **\*22** | **\*22** |
| 1.5–< 2.0 | 10 | 10 | 10 | 10 | 10 | 10 |
| 2.0–< 2.5 | 6 | 6 | 6 | 6 | 6 | 6 |
| 2.5–< 3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| 3.0–< 3.5 | 1 | 1 | 1 | 1 | 1 | 1 |
| > = 3.5 | 1 | 1 | 1 | 1 | 1 | 1 |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Eleven—ELA PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.0–< -2.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.5–< -2.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.0–< -1.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -1.5–< -1.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -1.0–< -0.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -0.5–< 0 | 3 | 3 | 3 | 3 | 3 | 3 |
| 0–< 0.5 | 2 | 2 | 2 | 2 | 2 | 2 |
| 0.5–< 1.0 | 8 | 8 | 8 | 8 | 8 | 8 |
| 1.0–< 1.5 | 26 | 26 | 26 | 26 | 26 | 26 |
| 1.5–< 2.0 | **\*36** | **\*36** | **\*36** | **\*36** | **\*36** | **\*36** |
| 2.0–< 2.5 | 6 | 6 | 6 | 6 | 6 | 6 |
| 2.5–< 3.0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3.0–< 3.5 | 1 | 1 | 1 | 1 | 1 | 1 |
| > = 3.5 | 1 | 1 | 1 | 1 | 1 | 1 |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Three—Mathematics PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2100–2199** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.0–< -2.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.5–< -2.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.0–< -1.5 | 10 | 10 | 10 | 10 | 10 | 10 |
| -1.5–< -1.0 | **\*25** | **\*25** | **\*25** | **\*25** | **\*25** | **\*25** |
| -1.0–< -0.5 | 21 | 21 | 21 | 21 | 21 | 21 |
| -0.5–< 0 | 21 | 21 | 21 | 21 | 21 | 21 |
| 0–< 0.5 | 15 | 15 | 15 | 15 | 15 | 15 |
| 0.5–< 1.0 | 2 | 2 | 2 | 2 | 2 | 2 |
| 1.0–< 1.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1.5–< 2.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| 2.0–< 2.5 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2.5–< 3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| 3.0–< 3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| > = 3.5 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Four—Mathematics PT Items

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | N/A | N/A | N/A | N/A | N/A |
| -3.0–< -2.5 | N/A | N/A | N/A | N/A | N/A |
| -2.5–< -2.0 | N/A | N/A | N/A | N/A | N/A |
| -2.0–< -1.5 | 9 | 9 | 9 | 9 | 9 |
| -1.5–< -1.0 | 17 | 17 | 17 | 17 | 17 |
| -1.0–< -0.5 | 16 | 16 | 16 | 16 | 16 |
| -0.5–< 0 | 13 | 13 | 13 | 13 | 13 |
| 0–< 0.5 | **\*32** | **\*32** | **\*32** | **\*32** | **\*32** |
| 0.5–< 1.0 | 21 | 21 | 21 | 21 | 21 |
| 1.0–< 1.5 | 4 | 4 | 4 | 4 | 4 |
| 1.5–< 2.0 | 3 | 3 | 3 | 3 | 3 |
| 2.0–< 2.5 | 1 | 1 | 1 | 1 | 1 |
| 2.5–< 3.0 | N/A | N/A | N/A | N/A | N/A |
| 3.0–< 3.5 | N/A | N/A | N/A | N/A | N/A |
| > = 3.5 | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Five—Mathematics PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.0–< -2.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.5–< -2.0 | 3 | 3 | 3 | 3 | 3 | 3 |
| -2.0–< -1.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -1.5–< -1.0 | 5 | 5 | 5 | 5 | 5 | 5 |
| -1.0–< -0.5 | 3 | 3 | 3 | 3 | 3 | 3 |
| -0.5–< 0 | 8 | 8 | 8 | 8 | 8 | 8 |
| 0–< 0.5 | 10 | 10 | 10 | 10 | 10 | 10 |
| 0.5–< 1.0 | **\*34** | **\*34** | **\*34** | **\*34** | **\*34** | **\*34** |
| 1.0–< 1.5 | 21 | 21 | 21 | 21 | 21 | 21 |
| 1.5–< 2.0 | 11 | 11 | 11 | 11 | 11 | 11 |
| 2.0–< 2.5 | 7 | 7 | 7 | 7 | 7 | 7 |
| 2.5–< 3.0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3.0–< 3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| > = 3.5 | 2 | 2 | 2 | 2 | 2 | 2 |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Six—Mathematics PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.0–< -2.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.5–< -2.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.0–< -1.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -1.5–< -1.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -1.0–< -0.5 | 15 | 15 | 15 | 15 | 15 | 15 |
| -0.5–< 0 | 12 | 12 | 12 | 12 | 12 | 12 |
| 0–< 0.5 | 13 | 13 | 13 | 13 | 13 | 13 |
| 0.5–< 1.0 | 8 | 8 | 8 | 8 | 8 | 8 |
| 1.0–< 1.5 | 14 | 14 | 14 | 14 | 14 | 14 |
| 1.5–< 2.0 | **\*20** | **\*20** | **\*20** | **\*20** | **\*20** | **\*20** |
| 2.0–< 2.5 | 10 | 10 | 10 | 10 | 10 | 10 |
| 2.5–< 3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| 3.0–< 3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| > = 3.5 | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Seven—Mathematics PT Items

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.0–< -2.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.5–< -2.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.0–< -1.5 | N/A | N/A | N/A | N/A | N/A | N/A |
| -1.5–< -1.0 | N/A | N/A | N/A | N/A | N/A | N/A |
| -1.0–< -0.5 | 7 | 7 | 7 | 7 | 7 | 7 |
| -0.5–< 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0–< 0.5 | 11 | 11 | 11 | 11 | 11 | 11 |
| 0.5–< 1.0 | 7 | 7 | 7 | 7 | 7 | 7 |
| 1.0–< 1.5 | **\*25** | **\*25** | **\*25** | **\*25** | **\*25** | **\*25** |
| 1.5–< 2.0 | 12 | 12 | 12 | 12 | 12 | 12 |
| 2.0–< 2.5 | 16 | 16 | 16 | 16 | 16 | 16 |
| 2.5–< 3.0 | 8 | 8 | 8 | 8 | 8 | 8 |
| 3.0–< 3.5 | 2 | 2 | 2 | 2 | 2 | 2 |
| > = 3.5 | 3 | 3 | 3 | 3 | 3 | 3 |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Eight—Mathematics PT Items

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** | **2800–2899** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.0–< -2.5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -2.5–< -2.0 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.0–< -1.5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -1.5–< -1.0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| -1.0–< -0.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| -0.5–< 0 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 0–< 0.5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 0.5–< 1.0 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 1.0–< 1.5 | 13 | 13 | 13 | 13 | 13 | 13 | 13 |
| 1.5–< 2.0 | **\*22** | **\*22** | **\*22** | **\*22** | **\*22** | **\*22** | **\*22** |
| 2.0–< 2.5 | 17 | 17 | 17 | 17 | 17 | 17 | 17 |
| 2.5–< 3.0 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 3.0–< 3.5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| > = 3.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.A. Distribution of IRT *b*-values Conditional on Ability for Grade Eleven—Mathematics PT Items

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **IRT *b*-value** | **2200–2299** | **2300–2399** | **2400–2499** | **2500–2599** | **2600–2699** | **2700–2799** | **2800–2899** |
| < -3.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.5–< -3.0 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| -3.0–< -2.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.5–< -2.0 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| -2.0–< -1.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| -1.5–< -1.0 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| -1.0–< -0.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| -0.5–< 0 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 0–< 0.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 0.5–< 1.0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 1.0–< 1.5 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| 1.5–< 2.0 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 2.0–< 2.5 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 2.5–< 3.0 | 14 | 14 | 14 | 14 | 14 | 14 | 14 |
| 3.0–< 3.5 | **\*15** | **\*15** | **\*15** | **\*15** | **\*15** | **\*15** | **\*15** |
| > = 3.5 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |

Table 8.A. PT Item Statistics for Grade Three—ELA

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item ID | Score Points | A | B | D |
| VH295223 | 3 | 1.00 | -0.07 | 1.25, 0.03, -1.28 |
| VH295224 | 2 | 1.09 | -0.69 | 0.45, -0.45 |
| VH295345 | 3 | 0.67 | -0.78 | 1.95, 0.04, -1.99 |
| VH295346 | 2 | 0.73 | -1.41 | 0.82, -0.82 |
| VH295419 | 3 | 0.62 | -0.66 | 1.85, -0.16, -1.69 |
| VH295420 | 2 | 0.67 | -1.28 | 0.47, -0.47 |
| VH295562 | 4 | 0.60 | -0.00 | 0.39, 1.47, -0.13, -1.73 |
| VH295563 | 2 | 0.95 | -0.56 | 0.22, -0.22 |
| VH295660 | 3 | 0.86 | -0.82 | 1.76, -0.02, -1.74 |
| VH295661 | 2 | 0.86 | -1.26 | 0.75, -0.75 |
| VH295671 | 3 | 0.55 | 0.06 | 1.54, 0.19, -1.73 |
| VH295672 | 2 | 0.60 | -0.72 | 0.53, -0.53 |
| VH295685 | 4 | 0.54 | 0.13 | 0.74, 1.33, -0.18, -1.89 |
| VH295686 | 2 | 0.80 | -0.65 | 0.10, -0.10 |
| VH295714 | 3 | 0.66 | -0.03 | 1.02, 0.40, -1.42 |
| VH295715 | 2 | 0.75 | -0.62 | 0.35, -0.35 |
| VH295881 | 4 | 0.64 | 0.03 | 0.76, 1.07, -0.24, -1.59 |
| VH295882 | 2 | 1.03 | -0.66 | 0.16, -0.16 |
| VH295913 | 3 | 0.71 | -0.36 | 1.40, -0.01, -1.39 |
| VH295914 | 2 | 0.86 | -0.93 | 0.38, -0.38 |
| VH295963 | 3 | 0.67 | 0.07 | 0.76, 0.41, -1.18 |
| VH295964 | 2 | 0.75 | -0.57 | -0.10, 0.10 |
| VH295998 | 3 | 0.58 | -0.44 | 1.64, -0.11, -1.53 |
| VH295999 | 2 | 0.63 | -1.10 | 0.36, -0.36 |
| VH296069 | 4 | 0.49 | 0.62 | 0.12, 1.42, 0.17, -1.71 |
| VH296070 | 2 | 0.76 | -0.11 | -0.03, 0.03 |
| VH945445 | 4 | 0.36 | 0.07 | -0.35, 2.12, 0.16, -1.92 |
| VH945446 | 2 | 0.61 | -0.66 | 0.13, -0.13 |
| VH945455 | 4 | 0.45 | 0.23 | 2.65, 0.78, -0.51, -2.92 |
| VH945456 | 2 | 0.51 | -1.52 | 0.45, -0.45 |
| VH945559 | 4 | 0.52 | 0.19 | 2.00, 0.88, -1.04, -1.85 |
| VH945560 | 2 | 0.55 | -1.29 | 0.28, -0.28 |
| VH945569 | 4 | 0.28 | 0.79 | -0.81, 1.87, -0.01, -1.05 |
| VH945570 | 2 | 0.46 | -0.05 | -0.42, 0.42 |
| VH945580 | 4 | 0.48 | 0.09 | 1.87, 0.84, -0.71, -1.99 |
| VH945581 | 2 | 0.54 | -1.39 | 0.18, -0.18 |
| VH295688 | 2 | 0.91 | 1.18 | 0.50, -0.50 |
| VH945567 | 1 | 0.41 | -0.31 | N/A |
| VH295947 | 2 | 0.38 | -0.57 | 0.57, -0.57 |
| VH295995 | 2 | 0.98 | 1.02 | 0.40, -0.40 |
| VH295877 | 2 | 0.69 | 0.61 | 0.42, -0.42 |
| VH295674 | 2 | 0.55 | -0.19 | 0.13, -0.13 |
| VH295916 | 1 | 0.61 | 0.04 | N/A |
| VH295417 | 1 | 0.62 | 1.59 | N/A |
| VH295225 | 2 | 0.90 | 0.80 | 0.08, -0.08 |
| VH295658 | 2 | 1.02 | 0.24 | 0.42, -0.42 |
| VH295564 | 2 | 0.64 | 0.36 | 0.91, -0.91 |
| VH945453 | 1 | 0.40 | -1.25 | N/A |
| VH945578 | 2 | 0.71 | 0.28 | 0.76, -0.76 |
| VH295711 | 2 | 0.47 | -0.73 | -0.70, 0.70 |
| VH945443 | 1 | 0.64 | 0.65 | N/A |
| VH295343 | 2 | 0.99 | 0.66 | 0.43, -0.43 |
| VH945557 | 1 | 0.47 | 1.86 | N/A |
| VH295961 | 2 | 0.73 | 0.56 | 0.10, -0.10 |
| VH296066 | 1 | 0.86 | 0.01 | N/A |
| VH295951 | 4 | 0.38 | 0.85 | -0.74, 1.91, 0.08, -1.25 |
| VH295952 | 2 | 0.60 | 0.19 | -0.28, 0.28 |

Table 8.A. PT Item Statistics for Grade Four—ELA

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item ID** | **Score Points** | **A** | **B** | **D** |
| VH295259 | 4 | 0.41 | 0.10 | -0.21, 1.51, 0.11, -1.41 |
| VH295260 | 2 | 0.82 | -0.08 | 0.47, -0.47 |
| VH295352 | 4 | 0.52 | -0.06 | 0.63, 1.05, -0.43, -1.25 |
| VH295353 | 2 | 0.87 | -0.14 | 0.42, -0.42 |
| VH295427 | 4 | 0.39 | 0.97 | 2.10, 1.67, -0.61, -3.16 |
| VH295428 | 2 | 0.53 | -0.25 | -0.04, 0.04 |
| VH295460 | 3 | 0.74 | -0.49 | 0.96, 0.31, -1.28 |
| VH295461 | 2 | 0.98 | -0.38 | 0.45, -0.45 |
| VH295494 | 4 | 0.61 | 0.44 | 2.26, 1.03, -0.80, -2.48 |
| VH295495 | 2 | 0.87 | -0.36 | 0.43, -0.43 |
| VH295523 | 4 | 0.60 | 0.36 | 1.49, 1.33, -0.47, -2.34 |
| VH295524 | 2 | 0.85 | -0.39 | 0.27, -0.27 |
| VH295588 | 4 | 0.49 | 0.10 | -0.25, 1.17, -0.04, -0.88 |
| VH295589 | 2 | 0.85 | 0.04 | 0.18, -0.18 |
| VH295632 | 3 | 0.52 | -0.09 | 0.85, 0.70, -1.55 |
| VH295633 | 2 | 0.77 | -0.15 | 0.39, -0.39 |
| VH295645 | 4 | 0.49 | 0.20 | 0.29, 1.19, -0.20, -1.29 |
| VH295646 | 2 | 0.90 | -0.02 | 0.26, -0.26 |
| VH295708 | 3 | 0.65 | -0.26 | 0.74, 0.41, -1.15 |
| VH295709 | 2 | 0.90 | -0.30 | 0.40, -0.40 |
| VH295732 | 4 | 0.45 | 0.59 | 1.54, 1.38, -0.23, -2.68 |
| VH295733 | 2 | 0.67 | -0.36 | 0.01, -0.01 |
| VH295776 | 4 | 0.53 | -0.10 | 0.86, 1.00, -0.54, -1.31 |
| VH295777 | 2 | 0.85 | -0.27 | 0.44, -0.44 |
| VH295782 | 4 | 0.43 | 0.34 | 0.49, 1.24, 0.04, -1.77 |
| VH295783 | 2 | 0.77 | -0.04 | 0.33, -0.33 |
| VH295788 | 3 | 0.63 | -0.46 | 0.83, 0.37, -1.20 |
| VH295789 | 2 | 0.94 | -0.31 | 0.52, -0.52 |
| VH295859 | 4 | 0.55 | 0.16 | 0.21, 1.19, -0.18, -1.22 |
| VH295860 | 2 | 0.90 | -0.19 | 0.15, -0.15 |
| VH295866 | 4 | 0.49 | 0.24 | 0.45, 1.17, -0.06, -1.56 |
| VH295867 | 2 | 0.91 | 0.05 | 0.31, -0.31 |
| VH295893 | 4 | 0.47 | 0.61 | 1.95, 1.55, -0.83, -2.67 |
| VH295894 | 2 | 0.65 | -0.44 | 0.28, -0.28 |
| VH295957 | 3 | 0.44 | -0.15 | 1.28, 0.63, -1.90 |
| VH295958 | 2 | 0.66 | -0.34 | 0.16, -0.16 |
| VH945430 | 4 | 0.38 | 0.30 | -0.43, 1.30, 0.10, -0.96 |
| VH945431 | 2 | 0.58 | -0.32 | -0.35, 0.35 |
| VH945440 | 4 | 0.41 | 1.07 | 2.57, 1.57, -0.77, -3.37 |
| VH945441 | 2 | 0.48 | -0.53 | -0.10, 0.10 |
| VH945564 | 4 | 0.49 | 0.85 | 2.43, 1.36, -0.81, -2.98 |
| VH945565 | 2 | 0.55 | -0.58 | 0.00, 0.00 |
| VH945589 | 4 | 0.37 | 0.04 | -0.05, 1.45, -0.39, -1.01 |
| VH945590 | 2 | 0.62 | -0.52 | -0.07, 0.07 |
| VH945587 | 2 | 0.50 | 0.57 | 0.50, -0.50 |
| VH295779 | 2 | 0.51 | 0.97 | 0.68, -0.68 |
| VH295520 | 2 | 0.48 | 0.10 | 0.55, -0.55 |
| VH295705 | 2 | 0.89 | 0.77 | 0.27, -0.27 |
| VH295492 | 2 | 1.03 | 0.78 | 0.97, -0.97 |
| VH295257 | 2 | 0.71 | 1.07 | 0.56, -0.56 |
| VH295423 | 2 | 0.80 | 0.51 | 0.62, -0.62 |
| VH295861 | 1 | 0.52 | 1.41 | N/A |
| VH945562 | 1 | 0.49 | -1.76 | N/A |
| VH945428 | 1 | 0.46 | 1.48 | N/A |
| VH295954 | 2 | 0.58 | 0.62 | -0.05, 0.05 |
| VH295457 | 1 | 0.48 | -1.15 | N/A |
| VH295774 | 1 | 0.70 | 0.50 | N/A |
| VH295642 | 1 | 0.40 | -1.52 | N/A |
| VH295629 | 2 | 0.42 | 1.76 | 0.16, -0.16 |
| VH295791 | 1 | 0.41 | 0.13 | N/A |
| VH295349 | 2 | 0.60 | -0.16 | 0.14, -0.14 |
| VH945438 | 2 | 0.62 | 0.93 | 1.04, -1.04 |
| VH295730 | 2 | 0.53 | 0.03 | -0.89, 0.89 |
| VH295863 | 2 | 0.93 | 1.00 | 0.33, -0.33 |
| VH295590 | 2 | 0.72 | 0.03 | -0.15, 0.15 |
| VH295895 | 2 | 0.67 | -0.48 | 0.23, -0.23 |

Table 8.A. PT Item Statistics for Grade Five—ELA

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item ID** | **Score Points** | **A** | **B** | **D** |
| VH295216 | 4 | 0.54 | 0.30 | 0.63, 1.85, -0.21, -2.27 |
| VH295217 | 2 | 1.03 | 0.05 | 0.63, -0.63 |
| VH295231 | 4 | 0.65 | 0.07 | 1.86, 0.83, -0.65, -2.03 |
| VH295232 | 2 | 0.81 | -0.29 | 0.95, -0.95 |
| VH295239 | 4 | 0.73 | 0.14 | 1.42, 0.84, -0.44, -1.82 |
| VH295240 | 2 | 1.00 | 0.07 | 0.70, -0.70 |
| VH295407 | 4 | 0.59 | -0.10 | 2.19, 0.67, -0.72, -2.14 |
| VH295408 | 2 | 0.77 | -0.43 | 1.02, -1.02 |
| VH295432 | 4 | 0.66 | 0.09 | 1.89, 0.89, -0.62, -2.16 |
| VH295433 | 2 | 0.98 | -0.40 | 0.89, -0.89 |
| VH295453 | 4 | 0.57 | 0.05 | 2.34, 0.75, -0.66, -2.42 |
| VH295454 | 2 | 0.82 | -0.42 | 1.06, -1.06 |
| VH295481 | 4 | 0.54 | 0.04 | 0.55, 1.37, -0.22, -1.70 |
| VH295482 | 2 | 1.06 | -0.04 | 0.74, -0.74 |
| VH295544 | 4 | 0.56 | 0.24 | 2.05, 0.80, -0.55, -2.30 |
| VH295545 | 2 | 0.87 | -0.22 | 0.94, -0.94 |
| VH295741 | 4 | 0.74 | 0.21 | 0.75, 1.30, -0.32, -1.72 |
| VH295742 | 2 | 1.25 | 0.07 | 0.79, -0.79 |
| VH295794 | 4 | 0.64 | 0.29 | 2.21, 0.77, -0.40, -2.58 |
| VH295795 | 2 | 0.91 | -0.22 | 0.75, -0.75 |
| VH295811 | 4 | 0.64 | 0.24 | 1.07, 1.20, -0.10, -2.17 |
| VH295812 | 2 | 1.14 | -0.04 | 0.90, -0.90 |
| VH295836 | 4 | 0.61 | 0.28 | 0.58, 1.49, -0.27, -1.80 |
| VH295837 | 2 | 1.12 | 0.03 | 0.77, -0.77 |
| VH295901 | 4 | 0.41 | 1.00 | -0.73, 2.33, 0.26, -1.86 |
| VH295902 | 2 | 0.75 | 0.40 | 0.09, -0.09 |
| VH295921 | 4 | 0.57 | 0.29 | 0.49, 1.43, -0.06, -1.86 |
| VH295922 | 2 | 1.07 | -0.04 | 0.71, -0.71 |
| VH295972 | 4 | 0.59 | 0.21 | 2.39, 0.67, -0.69, -2.37 |
| VH295973 | 2 | 0.91 | -0.22 | 0.85, -0.85 |
| VH296034 | 4 | 0.70 | 0.37 | 1.79, 0.95, -0.53, -2.20 |
| VH296035 | 2 | 1.08 | 0.03 | 0.64, -0.64 |
| VH296048 | 4 | 0.56 | -0.04 | 0.04, 1.56, -0.11, -1.49 |
| VH296049 | 2 | 0.98 | -0.07 | 0.52, -0.52 |
| VH296073 | 4 | 0.66 | 0.14 | 2.09, 0.72, -0.44, -2.38 |
| VH296075 | 2 | 0.91 | -0.28 | 0.91, -0.91 |
| VH296082 | 4 | 0.58 | 0.11 | 2.42, 0.83, -0.70, -2.55 |
| VH296083 | 2 | 0.80 | -0.34 | 1.13, -1.13 |
| VH296091 | 4 | 0.62 | 0.24 | 0.82, 1.69, -0.35, -2.16 |
| VH296092 | 2 | 0.96 | -0.12 | 0.68, -0.68 |
| VH945410 | 4 | 0.28 | 0.62 | 2.06, 1.82, -0.77, -3.10 |
| VH945411 | 2 | 0.26 | -1.69 | -1.43, 1.43 |
| VH945415 | 4 | 0.40 | 0.47 | 2.07, 1.13, -0.78, -2.42 |
| VH945416 | 2 | 0.46 | -0.94 | 0.46, -0.46 |
| VH945450 | 4 | 0.26 | 0.95 | 1.54, 2.06, -0.35, -3.26 |
| VH945451 | 2 | 0.30 | -0.89 | -0.15, 0.15 |
| VH945518 | 4 | 0.29 | 0.87 | 2.00, 1.59, -0.33, -3.26 |
| VH945519 | 2 | 0.33 | -0.97 | 0.19, -0.19 |
| VH945602 | 4 | 0.37 | -0.10 | -1.11, 1.76, 0.65, -1.30 |
| VH945603 | 2 | 0.69 | -0.02 | 0.56, -0.56 |
| VH296077 | 2 | 0.94 | 0.95 | 0.29, -0.29 |
| VH296088 | 2 | 0.68 | 0.44 | -0.03, 0.03 |
| VH296032 | 2 | 0.78 | 0.87 | 0.48, -0.48 |
| VH945516 | 2 | 0.47 | 1.68 | 0.49, -0.49 |
| VH295541 | 2 | 0.87 | 0.82 | 0.47, -0.47 |
| VH295430 | 2 | 0.67 | -0.00 | 0.59, -0.59 |
| VH295739 | 2 | 0.81 | 1.52 | 0.82, -0.82 |
| VH295838 | 1 | 0.50 | 0.45 | N/A |
| VH295229 | 2 | 0.58 | 1.57 | 0.89, -0.89 |
| VH295404 | 2 | 0.80 | 0.88 | 0.29, -0.29 |
| VH295235 | 1 | 0.59 | 1.58 | N/A |
| VH295924 | 1 | 0.40 | -0.66 | N/A |
| VH295903 | 1 | 0.63 | 1.66 | N/A |
| VH295478 | 1 | 0.48 | 1.42 | N/A |
| VH295213 | 1 | 0.65 | 0.21 | N/A |
| VH295450 | 2 | 0.79 | 0.76 | 0.37, -0.37 |
| VH295968 | 2 | 0.87 | 0.90 | 0.45, -0.45 |
| VH945413 | 2 | 0.48 | 1.15 | 0.12, -0.12 |
| VH296044 | 2 | 0.72 | 0.74 | 0.55, -0.55 |
| VH296080 | 2 | 0.50 | -0.34 | 0.30, -0.30 |
| VH945408 | 2 | 0.56 | 1.24 | 0.42, -0.42 |
| VH295796 | 1 | 0.60 | 1.40 | N/A |
| VH945448 | 1 | 0.61 | 1.55 | N/A |
| VH295807 | 2 | 0.75 | 0.38 | 0.50, -0.50 |
| VH945600 | 1 | 0.55 | 1.64 | N/A |

Table 8.A. PT Item Statistics for Grade Six—ELA

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item ID | Score Points | A | B | D |
| VH295317 | 4 | 1.05 | 0.66 | 1.94, 0.74, -0.71, -1.97 |
| VH295318 | 2 | 1.30 | -0.06 | 0.35, -0.35 |
| VH295440 | 4 | 0.69 | 0.37 | 0.95, 0.97, -0.35, -1.57 |
| VH295441 | 2 | 1.11 | -0.03 | 0.32, -0.32 |
| VH295558 | 4 | 0.58 | 0.39 | 0.31, 1.34, -0.17, -1.48 |
| VH295559 | 2 | 1.03 | 0.12 | 0.26, -0.26 |
| VH295584 | 4 | 0.88 | 0.74 | 1.51, 1.04, -0.69, -1.86 |
| VH295585 | 2 | 1.01 | -0.03 | 0.22, -0.22 |
| VH295664 | 4 | 0.74 | 0.42 | 0.50, 1.14, -0.19, -1.45 |
| VH295665 | 2 | 1.34 | -0.09 | 0.21, -0.21 |
| VH295681 | 4 | 0.83 | 0.67 | 1.30, 1.07, -0.57, -1.81 |
| VH295682 | 2 | 1.14 | -0.14 | 0.25, -0.25 |
| VH295694 | 4 | 0.63 | 0.72 | 1.91, 0.76, -0.74, -1.93 |
| VH295695 | 2 | 0.88 | -0.05 | 0.32, -0.32 |
| VH295755 | 4 | 0.79 | 0.46 | 2.02, 0.63, -0.84, -1.80 |
| VH295756 | 2 | 0.91 | -0.21 | 0.30, -0.30 |
| VH295825 | 4 | 0.77 | 0.58 | 2.19, 1.31, -0.76, -2.74 |
| VH295826 | 2 | 0.95 | -0.44 | 0.38, -0.38 |
| VH295874 | 4 | 0.69 | 0.60 | 0.13, 1.24, -0.19, -1.17 |
| VH295875 | 2 | 1.10 | 0.13 | -0.08, 0.08 |
| VH295937 | 4 | 0.96 | 0.65 | 1.59, 0.67, -0.64, -1.62 |
| VH295938 | 2 | 1.09 | -0.00 | 0.29, -0.29 |
| VH295985 | 4 | 0.94 | 0.53 | 2.16, 1.10, -0.90, -2.37 |
| VH295986 | 2 | 1.07 | -0.30 | 0.41, -0.41 |
| VH296013 | 4 | 0.93 | 0.77 | 1.61, 0.79, -0.71, -1.69 |
| VH296014 | 2 | 1.15 | -0.04 | 0.31, -0.31 |
| VH296041 | 3 | 1.03 | 0.08 | 1.24, 0.21, -1.45 |
| VH296042 | 2 | 1.35 | -0.06 | 0.32, -0.32 |
| VH945508 | 4 | 0.41 | 1.20 | 2.58, 1.22, -1.09, -2.71 |
| VH945509 | 2 | 0.45 | -0.59 | -0.03, 0.03 |
| VH945513 | 4 | 0.46 | 1.08 | 2.38, 1.25, -0.70, -2.92 |
| VH945514 | 2 | 0.55 | -0.56 | 0.14, -0.14 |
| VH945533 | 4 | 0.37 | 0.95 | -0.71, 1.96, 0.76, -2.01 |
| VH945534 | 2 | 0.55 | 0.03 | -0.67, 0.67 |
| VH945543 | 4 | 0.46 | 1.11 | 2.40, 1.04, -1.13, -2.31 |
| VH945544 | 2 | 0.49 | -0.66 | -0.15, 0.15 |
| VH945548 | 4 | 0.39 | 1.38 | 2.62, 1.15, -0.86, -2.91 |
| VH945549 | 2 | 0.44 | -0.39 | -0.06, 0.06 |
| VH295691 | 2 | 0.90 | 1.48 | 0.68, -0.68 |
| VH296037 | 2 | 1.22 | 1.22 | 0.32, -0.32 |
| VH295677 | 2 | 0.87 | 1.63 | 0.73, -0.73 |
| VH945506 | 2 | 0.49 | 1.18 | 1.01, -1.01 |
| VH295666 | 2 | 0.72 | 1.04 | 0.73, -0.73 |
| VH295315 | 2 | 0.96 | 1.62 | 0.30, -0.30 |
| VH945511 | 2 | 0.48 | 1.63 | -0.48, 0.48 |
| VH295983 | 2 | 0.67 | 0.61 | 0.52, -0.52 |
| VH295821 | 2 | 0.78 | 1.10 | 0.34, -0.34 |
| VH295582 | 1 | 1.05 | 1.71 | N/A |
| VH945531 | 1 | 0.60 | 1.59 | N/A |
| VH945541 | 2 | 0.48 | -0.08 | 0.45, -0.45 |
| VH295872 | 2 | 0.74 | 0.79 | 0.32, -0.32 |
| VH295752 | 2 | 0.89 | 1.32 | 0.44, -0.44 |
| VH295555 | 2 | 0.76 | 1.23 | 0.48, -0.48 |
| VH296009 | 1 | 0.92 | 1.66 | N/A |
| VH295933 | 1 | 0.64 | -0.11 | N/A |
| VH295437 | 2 | 0.73 | 1.49 | -0.02, 0.02 |
| VH945546 | 1 | 0.61 | 1.42 | N/A |

Table 8.A. PT Item Statistics for Grade Seven—ELA

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item ID** | **Score Points** | **A** | **B** | **D** |
| VH295267 | 3 | 0.73 | 0.51 | 1.74, -0.04, -1.70 |
| VH295268 | 2 | 0.87 | -0.03 | 0.64, -0.64 |
| VH295272 | 4 | 0.67 | 1.25 | 2.31, 0.66, -0.83, -2.15 |
| VH295273 | 2 | 0.83 | 0.05 | 0.49, -0.49 |
| VH295310 | 3 | 0.82 | 0.49 | 1.35, 0.15, -1.50 |
| VH295311 | 2 | 0.96 | -0.05 | 0.42, -0.42 |
| VH295322 | 4 | 1.14 | 1.22 | 2.17, 0.59, -0.60, -2.16 |
| VH295323 | 2 | 1.33 | 0.16 | 0.59, -0.59 |
| VH295335 | 3 | 1.25 | 0.63 | 1.33, -0.05, -1.28 |
| VH295336 | 2 | 1.50 | 0.34 | 0.54, -0.54 |
| VH295373 | 3 | 0.99 | 1.00 | 0.97, 0.02, -0.99 |
| VH295374 | 2 | 1.20 | 0.59 | 0.37, -0.37 |
| VH295399 | 3 | 1.28 | 0.93 | 1.03, 0.02, -1.05 |
| VH295400 | 2 | 1.65 | 0.52 | 0.41, -0.41 |
| VH295411 | 4 | 0.88 | 1.24 | 2.21, 0.70, -0.68, -2.23 |
| VH295412 | 2 | 1.00 | -0.13 | 0.30, -0.30 |
| VH295509 | 3 | 0.80 | 0.73 | 1.48, 0.29, -1.76 |
| VH295510 | 2 | 0.97 | 0.12 | 0.48, -0.48 |
| VH295529 | 4 | 0.66 | 1.27 | 1.47, 0.62, -0.37, -1.72 |
| VH295530 | 2 | 0.90 | 0.58 | 0.26, -0.26 |
| VH295577 | 4 | 0.66 | 0.78 | 1.47, 0.65, -0.32, -1.79 |
| VH295578 | 2 | 0.98 | 0.42 | 0.48, -0.48 |
| VH295611 | 4 | 0.61 | 0.89 | 1.58, 1.04, -0.36, -2.26 |
| VH295612 | 2 | 0.95 | 0.17 | 0.38, -0.38 |
| VH295637 | 3 | 0.70 | 0.56 | 1.31, 0.22, -1.53 |
| VH295638 | 2 | 0.88 | -0.00 | 0.40, -0.40 |
| VH295720 | 3 | 0.94 | 0.63 | 1.53, -0.11, -1.42 |
| VH295721 | 2 | 0.99 | 0.15 | 0.52, -0.52 |
| VH295762 | 4 | 0.66 | 1.08 | 0.75, 0.72, 0.00, -1.47 |
| VH295763 | 2 | 1.02 | 0.52 | 0.14, -0.14 |
| VH295907 | 3 | 0.71 | 0.84 | 1.51, -0.10, -1.41 |
| VH295908 | 2 | 0.92 | 0.37 | 0.58, -0.58 |
| VH295944 | 3 | 0.83 | 0.76 | 1.68, -0.07, -1.61 |
| VH295945 | 2 | 0.82 | 0.17 | 0.55, -0.55 |
| VH296105 | 3 | 1.00 | 0.59 | 1.27, 0.04, -1.31 |
| VH296106 | 2 | 1.24 | 0.27 | 0.56, -0.56 |
| VH296118 | 3 | 0.68 | 0.55 | 1.66, 0.14, -1.80 |
| VH296119 | 2 | 0.87 | -0.06 | 0.56, -0.56 |
| VH945435 | 4 | 0.44 | 1.15 | 1.04, 1.73, -0.55, -2.21 |
| VH945436 | 2 | 0.51 | -0.14 | -0.41, 0.41 |
| VH945460 | 4 | 0.46 | 1.52 | 2.03, 1.49, -0.72, -2.80 |
| VH945461 | 2 | 0.44 | -0.31 | -0.59, 0.59 |
| VH945464 | 4 | 0.49 | 1.55 | 2.43, 1.23, -0.55, -3.12 |
| VH945465 | 2 | 0.46 | -0.33 | -0.23, 0.23 |
| VH945528 | 4 | 0.43 | 1.56 | 2.69, 1.28, -0.86, -3.12 |
| VH945529 | 2 | 0.47 | -0.26 | 0.08, -0.08 |
| VH945574 | 4 | 0.51 | 1.15 | 0.67, 1.45, -0.63, -1.50 |
| VH945575 | 2 | 0.65 | 0.10 | -0.35, 0.35 |
| VH295635 | 2 | 0.66 | 2.02 | 0.17, -0.17 |
| VH295909 | 2 | 0.72 | 1.08 | 0.17, -0.17 |
| VH296116 | 2 | 0.61 | 1.70 | 0.42, -0.42 |
| VH945466 | 1 | 0.91 | 2.07 | N/A |
| VH945526 | 1 | 0.54 | 1.20 | N/A |
| VH295270 | 2 | 0.78 | 1.50 | 0.22, -0.22 |
| VH295371 | 2 | 0.75 | 2.38 | 0.92, -0.92 |
| VH295717 | 2 | 0.75 | 2.05 | 0.27, -0.27 |
| VH945458 | 2 | 0.85 | 1.63 | 0.86, -0.86 |
| VH295574 | 2 | 0.72 | 1.15 | -0.05, 0.05 |
| VH295505 | 2 | 0.54 | 1.19 | 0.00, 0.00 |
| VH295941 | 2 | 0.92 | 1.41 | 0.36, -0.36 |
| VH295325 | 2 | 0.91 | 1.43 | 0.39, -0.39 |
| VH295401 | 2 | 0.81 | 1.28 | 0.29, -0.29 |
| VH295526 | 2 | 0.71 | 1.72 | -0.34, 0.34 |
| VH296102 | 2 | 1.00 | 1.40 | 0.35, -0.35 |
| VH295306 | 2 | 0.89 | 1.22 | 0.34, -0.34 |
| VH945572 | 2 | 0.72 | 1.48 | 0.25, -0.25 |
| VH295263 | 2 | 0.82 | 0.82 | 0.24, -0.24 |
| VH295609 | 1 | 0.59 | 0.54 | N/A |
| VH945433 | 2 | 0.59 | 1.70 | 0.37, -0.37 |
| VH295339 | 2 | 0.81 | 0.96 | 0.43, -0.43 |
| VH295759 | 2 | 0.76 | 1.28 | 0.18, -0.18 |
| VH295415 | 2 | 0.66 | 2.11 | 0.47, -0.47 |

Table 8.A. PT Item Statistics for Grade Eight—ELA

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item ID** | **Score Points** | **A** | **B** | **D** |
| VH295280 | 4 | 0.87 | 1.08 | 1.95, 0.99, -0.81, -2.13 |
| VH295281 | 2 | 0.99 | -0.01 | 0.30, -0.30 |
| VH295295 | 4 | 0.74 | 1.15 | 2.11, 1.06, -0.83, -2.33 |
| VH295296 | 2 | 0.78 | -0.16 | 0.37, -0.37 |
| VH295302 | 4 | 0.57 | 1.03 | -0.11, 1.27, -0.10, -1.06 |
| VH295303 | 2 | 0.90 | 0.44 | -0.29, 0.29 |
| VH295358 | 4 | 0.82 | 1.09 | 2.63, 0.80, -1.27, -2.16 |
| VH295359 | 2 | 0.82 | -0.11 | 0.42, -0.42 |
| VH295387 | 4 | 0.93 | 0.96 | 1.94, 0.77, -0.90, -1.81 |
| VH295388 | 2 | 1.01 | -0.05 | 0.40, -0.40 |
| VH295466 | 3 | 0.86 | 0.53 | 1.42, 0.24, -1.66 |
| VH295467 | 2 | 0.79 | 0.00 | 0.33, -0.33 |
| VH295487 | 4 | 0.75 | 0.96 | 2.39, 1.07, -1.02, -2.43 |
| VH295488 | 2 | 0.86 | -0.23 | 0.50, -0.50 |
| VH295514 | 3 | 0.64 | 0.39 | 1.77, 0.32, -2.09 |
| VH295515 | 2 | 0.71 | -0.30 | 0.59, -0.59 |
| VH295569 | 3 | 0.70 | 0.61 | 1.57, 0.36, -1.93 |
| VH295570 | 2 | 0.69 | -0.12 | 0.10, -0.10 |
| VH295597 | 4 | 0.57 | 1.06 | -0.21, 1.02, 0.05, -0.85 |
| VH295598 | 2 | 0.82 | 0.62 | -0.28, 0.28 |
| VH295605 | 4 | 0.98 | 0.77 | 1.90, 0.74, -0.83, -1.81 |
| VH295606 | 2 | 1.05 | -0.08 | 0.45, -0.45 |
| VH295625 | 4 | 0.87 | 1.01 | 2.21, 0.81, -0.68, -2.34 |
| VH295626 | 2 | 0.93 | -0.27 | 0.45, -0.45 |
| VH295769 | 4 | 0.70 | 0.78 | 2.19, 1.06, -1.12, -2.13 |
| VH295770 | 2 | 0.70 | -0.49 | 0.42, -0.42 |
| VH295832 | 4 | 0.96 | 1.10 | 2.24, 1.04, -0.75, -2.54 |
| VH295833 | 2 | 1.05 | -0.14 | 0.47, -0.47 |
| VH295846 | 4 | 0.91 | 1.06 | 2.31, 0.96, -1.00, -2.27 |
| VH295847 | 2 | 0.85 | -0.16 | 0.51, -0.51 |
| VH295979 | 3 | 0.70 | 0.42 | 1.42, 0.42, -1.83 |
| VH295980 | 2 | 0.77 | -0.26 | 0.30, -0.30 |
| VH296018 | 4 | 0.74 | 1.04 | 2.41, 1.23, -0.79, -2.85 |
| VH296019 | 2 | 0.88 | -0.34 | 0.40, -0.40 |
| VH296026 | 4 | 0.85 | 1.28 | 2.50, 0.83, -1.17, -2.16 |
| VH296027 | 2 | 0.72 | -0.09 | 0.29, -0.29 |
| VH296060 | 4 | 0.59 | 0.78 | 1.74, 0.56, -0.59, -1.71 |
| VH296061 | 2 | 0.73 | 0.07 | 0.27, -0.27 |
| VH296098 | 4 | 0.68 | 0.61 | 1.29, 0.66, -0.55, -1.40 |
| VH296099 | 2 | 0.99 | -0.08 | 0.22, -0.22 |
| VH945425 | 4 | 0.32 | 1.84 | 1.16, 2.50, -0.25, -3.41 |
| VH945426 | 2 | 0.37 | 0.17 | -0.27, 0.27 |
| VH945498 | 4 | 0.39 | 1.50 | 1.59, 1.96, -0.64, -2.91 |
| VH945499 | 2 | 0.47 | -0.05 | -0.04, 0.04 |
| VH945503 | 4 | 0.31 | 1.93 | 1.84, 2.69, 0.08, -4.61 |
| VH945504 | 2 | 0.24 | -0.97 | -2.32, 2.32 |
| VH945553 | 4 | 0.34 | 1.03 | 0.31, 1.53, 0.15, -1.99 |
| VH945554 | 2 | 0.40 | -0.17 | -1.08, 1.08 |
| VH945594 | 4 | 0.32 | 1.17 | 0.69, 0.70, 0.26, -1.65 |
| VH945595 | 2 | 0.35 | -0.17 | -1.63, 1.63 |
| VH295517 | 2 | 0.68 | 2.17 | 1.05, -1.05 |
| VH295765 | 2 | 0.88 | 1.36 | 0.46, -0.46 |
| VH945496 | 2 | 0.63 | 1.52 | 0.54, -0.54 |
| VH945423 | 1 | 0.37 | 3.42 | N/A |
| VH296063 | 2 | 0.62 | 1.55 | 0.26, -0.26 |
| VH295601 | 2 | 0.85 | 1.44 | 0.41, -0.41 |
| VH945592 | 1 | 0.49 | 2.49 | N/A |
| VH295829 | 2 | 0.83 | 1.49 | 0.39, -0.39 |
| VH295291 | 2 | 0.61 | 1.28 | 0.33, -0.33 |
| VH295355 | 2 | 0.72 | 2.04 | 0.64, -0.64 |
| VH295384 | 2 | 0.79 | 1.85 | 0.33, -0.33 |
| VH295622 | 2 | 0.79 | 2.39 | 0.35, -0.35 |
| VH945501 | 1 | 0.30 | 4.68 | N/A |
| VH295463 | 2 | 0.89 | 1.53 | 0.19, -0.19 |
| VH296095 | 2 | 0.78 | 1.35 | 0.11, -0.11 |
| VH945551 | 1 | 0.60 | 2.35 | N/A |
| VH295298 | 2 | 0.45 | 1.59 | 1.28, -1.28 |
| VH295843 | 2 | 0.82 | 1.54 | 0.04, -0.04 |
| VH295567 | 2 | 0.70 | 1.89 | 0.65, -0.65 |
| VH295485 | 1 | 0.22 | 1.46 | N/A |
| VH296023 | 2 | 0.74 | 1.32 | 0.46, -0.46 |
| VH295277 | 2 | 0.69 | 1.30 | 0.22, -0.22 |
| VH296021 | 2 | 0.53 | 1.44 | 0.07, -0.07 |
| VH295599 | 2 | 0.61 | 1.41 | 0.45, -0.45 |
| VH295975 | 2 | 0.84 | 2.14 | 0.78, -0.78 |

Table 8.A. PT Item Statistics for Grade Eleven—ELA

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item ID** | **Score Points** | **A** | **B** | **D** |
| VH295246 | 4 | 0.59 | 1.50 | 2.42, 0.67, -1.00, -2.09 |
| VH295247 | 2 | 0.75 | 1.02 | 0.26, -0.26 |
| VH295253 | 4 | 0.44 | 1.73 | 2.61, 1.03, -0.85, -2.78 |
| VH295254 | 2 | 0.52 | 0.95 | -0.21, 0.21 |
| VH295287 | 4 | 0.55 | 1.81 | 2.16, 1.00, -0.98, -2.17 |
| VH295288 | 2 | 0.80 | 1.26 | 0.41, -0.41 |
| VH295366 | 4 | 0.49 | 1.90 | 2.49, 0.74, -0.62, -2.61 |
| VH295367 | 2 | 0.64 | 1.22 | 0.38, -0.38 |
| VH295380 | 4 | 0.51 | 1.31 | 2.60, 1.03, -0.91, -2.72 |
| VH295381 | 2 | 0.58 | 0.83 | 0.04, -0.04 |
| VH295392 | 4 | 0.51 | 1.83 | 2.68, 0.93, -0.70, -2.91 |
| VH295393 | 2 | 0.56 | 1.09 | -0.01, 0.01 |
| VH295474 | 4 | 0.51 | 1.84 | 2.35, 1.17, -0.79, -2.72 |
| VH295475 | 2 | 0.63 | 1.08 | 0.03, -0.03 |
| VH295502 | 4 | 0.55 | 2.17 | 2.30, 0.71, -0.75, -2.25 |
| VH295503 | 2 | 0.60 | 1.30 | -0.12, 0.12 |
| VH295534 | 4 | 0.53 | 1.53 | 2.74, 0.92, -0.83, -2.83 |
| VH295535 | 2 | 0.58 | 0.91 | 0.09, -0.09 |
| VH295551 | 4 | 0.43 | 1.94 | 2.81, 0.71, -1.10, -2.41 |
| VH295552 | 2 | 0.50 | 1.20 | -0.25, 0.25 |
| VH295618 | 4 | 0.56 | 1.72 | 2.20, 0.84, -0.99, -2.04 |
| VH295619 | 2 | 0.61 | 1.13 | 0.09, -0.09 |
| VH295653 | 4 | 0.50 | 1.76 | 2.51, 0.67, -1.05, -2.13 |
| VH295654 | 2 | 0.63 | 1.47 | 0.23, -0.23 |
| VH295701 | 4 | 0.51 | 1.72 | 2.34, 1.09, -0.57, -2.86 |
| VH295702 | 2 | 0.66 | 1.01 | 0.01, -0.01 |
| VH295727 | 4 | 0.53 | 2.01 | 2.46, 1.06, -0.72, -2.80 |
| VH295728 | 2 | 0.62 | 1.09 | 0.13, -0.13 |
| VH295748 | 4 | 0.56 | 1.67 | 2.05, 0.61, -0.83, -1.84 |
| VH295749 | 2 | 0.71 | 1.14 | 0.21, -0.21 |
| VH295804 | 4 | 0.62 | 1.55 | 2.5, 0.64, -0.85, -2.29 |
| VH295805 | 2 | 0.75 | 1.10 | 0.56, -0.56 |
| VH295817 | 4 | 0.63 | 1.64 | 2.10, 0.60, -0.86, -1.84 |
| VH295818 | 2 | 0.65 | 1.08 | 0.23, -0.23 |
| VH295853 | 4 | 0.61 | 1.70 | 2.67, 0.91, -0.85, -2.73 |
| VH295854 | 2 | 0.69 | 1.06 | 0.25, -0.25 |
| VH295885 | 4 | 0.56 | 1.54 | 2.02, 1.04, -0.81, -2.25 |
| VH295886 | 2 | 0.69 | 1.07 | 0.12, -0.12 |
| VH295928 | 4 | 0.52 | 1.67 | 2.90, 0.89, -0.84, -2.95 |
| VH295929 | 2 | 0.59 | 0.83 | 0.16, -0.16 |
| VH295991 | 4 | 0.58 | 1.73 | 2.48, 0.81, -0.82, -2.47 |
| VH295992 | 2 | 0.63 | 1.07 | 0.09, -0.09 |
| VH296005 | 4 | 0.48 | 1.73 | 2.52, 0.71, -0.96, -2.28 |
| VH296006 | 2 | 0.57 | 1.15 | 0.04, -0.04 |
| VH296054 | 4 | 0.64 | 1.53 | 2.05, 0.83, -0.87, -2.01 |
| VH296055 | 2 | 0.70 | 0.84 | 0.25, -0.25 |
| VH945420 | 4 | 0.58 | 1.06 | 2.09, 1.57, -0.83, -2.83 |
| VH945421 | 2 | 0.59 | -0.22 | -0.12, 0.12 |
| VH945470 | 4 | 0.53 | 1.51 | 2.26, 1.73, -0.49, -3.51 |
| VH945471 | 2 | 0.66 | -0.04 | 0.44, -0.44 |
| VH945475 | 4 | 0.71 | 1.26 | 1.83, 1.55, -0.48, -2.90 |
| VH945476 | 2 | 0.79 | 0.01 | 0.53, -0.53 |
| VH945523 | 4 | 0.62 | 1.50 | 1.86, 1.68, -0.62, -2.92 |
| VH945524 | 2 | 0.71 | 0.07 | 0.44, -0.44 |
| VH945538 | 4 | 0.46 | 1.26 | 2.01, 1.90, -0.72, -3.19 |
| VH945539 | 2 | 0.49 | -0.41 | -0.69, 0.69 |
| VH945536 | 2 | 0.49 | 1.55 | 0.46, -0.46 |
| VH295802 | 2 | 0.71 | 1.92 | 0.62, -0.62 |
| VH945521 | 2 | 0.56 | 1.63 | 0.71, -0.71 |
| VH295615 | 2 | 0.64 | 2.12 | 0.27, -0.27 |
| VH295390 | 2 | 0.62 | 1.66 | 0.03, -0.03 |
| VH295887 | 2 | 0.68 | 2.15 | 1.09, -1.09 |
| VH295649 | 2 | 0.57 | 1.71 | 0.03, -0.03 |
| VH295284 | 2 | 0.63 | 0.74 | 0.27, -0.27 |
| VH945418 | 2 | 0.58 | 0.66 | 0.48, -0.48 |
| VH945473 | 1 | 0.37 | 4.19 | N/A |
| VH295926 | 1 | 0.41 | 1.70 | N/A |
| VH295697 | 2 | 0.64 | 1.50 | 0.31, -0.31 |
| VH295547 | 2 | 0.46 | 2.71 | 0.69, -0.69 |
| VH295377 | 2 | 0.66 | 1.79 | 0.46, -0.46 |
| VH295362 | 2 | 0.54 | 3.10 | 0.44, -0.44 |
| VH295243 | 2 | 0.87 | 1.51 | 0.68, -0.68 |
| VH295988 | 2 | 0.63 | 1.97 | 0.63, -0.63 |
| VH295744 | 2 | 0.73 | 1.82 | 0.28, -0.28 |
| VH295814 | 2 | 0.75 | 2.07 | 0.63, -0.63 |
| VH295499 | 2 | 0.57 | 1.95 | 0.10, -0.10 |
| VH945468 | 2 | 0.57 | 1.34 | 0.45, -0.45 |
| VH295723 | 1 | 0.59 | 1.98 | N/A |
| VH295251 | 1 | 0.34 | 0.69 | N/A |
| VH296003 | 2 | 0.63 | 1.38 | 0.45, -0.45 |
| VH295538 | 2 | 0.60 | 1.25 | -0.40, 0.40 |
| VH296052 | 2 | 0.64 | 2.01 | 0.21, -0.21 |
| VH295470 | 2 | 0.62 | 1.10 | 0.37, -0.37 |
| VH295851 | 2 | 0.71 | 1.61 | 1.19, -1.19 |

Table 8.A. PT Item Statistics for Grade Three—Mathematics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item ID** | **Score Points** | **A** | **B** | **D** |
| VH299779 | 1 | 1.14 | -1.07 | N/A |
| VH299780 | 1 | 0.91 | -0.13 | N/A |
| VH299781 | 2 | 0.86 | 0.19 | 0.57, -0.57 |
| VH299782 | 2 | 0.71 | -0.34 | -0.35, 0.35 |
| VH299783 | 2 | 1.07 | -0.59 | -0.34, 0.34 |
| VH299784 | 2 | 1.30 | 0.22 | 0.51, -0.51 |
| VH945773 | 1 | 1.20 | -1.41 | N/A |
| VH945774 | 1 | 0.94 | -1.47 | N/A |
| VH945775 | 1 | 0.94 | -0.89 | N/A |
| VH945776 | 2 | 0.67 | -0.77 | -0.82, 0.82 |
| VH945777 | 3 | 0.54 | 0.18 | 0.68, 0.36, -1.04 |
| VH299560 | 2 | 0.57 | -0.30 | -1.51, 1.51 |
| VH299561 | 2 | 0.84 | 0.82 | -0.63, 0.63 |
| VH299565 | 1 | 0.26 | 2.20 | N/A |
| VH324269 | 1 | 1.08 | -1.07 | N/A |
| VH324270 | 1 | 1.44 | -0.68 | N/A |
| VH324271 | 1 | 1.44 | -0.50 | N/A |
| VH299632 | 2 | 0.67 | 0.17 | 0.83, -0.83 |
| VH299637 | 2 | 0.59 | -0.18 | -0.34, 0.34 |
| VH299646 | 2 | 0.94 | -0.61 | -0.50, 0.50 |
| VH299647 | 2 | 1.10 | 0.27 | 0.47, -0.47 |
| VH324383 | 1 | 1.06 | -1.03 | N/A |
| VH324384 | 1 | 0.88 | -0.20 | N/A |
| VH299291 | 1 | 1.04 | -1.41 | N/A |
| VH299292 | 1 | 1.07 | -0.74 | N/A |
| VH299294 | 2 | 0.60 | -1.53 | 0.42, -0.42 |
| VH299295 | 1 | 0.68 | -0.38 | N/A |
| VH299297 | 2 | 0.61 | -0.57 | -0.62, 0.62 |
| VH299298 | 2 | 1.18 | 0.01 | 0.02, -0.02 |
| VH300360 | 2 | 0.82 | -0.45 | -0.34, 0.34 |
| VH300362 | 3 | 0.59 | -1.55 | -0.17, 0.69, -0.52 |
| VH300364 | 1 | 1.13 | -1.03 | N/A |
| VH300365 | 2 | 0.97 | 0.01 | 0.26, -0.26 |
| VH324345 | 1 | 1.19 | -1.26 | N/A |
| VH324346 | 1 | 0.98 | -1.22 | N/A |
| VH300058 | 1 | 1.07 | -1.40 | N/A |
| VH300059 | 1 | 1.22 | -0.58 | N/A |
| VH300060 | 2 | 0.49 | -1.28 | 0.64, -0.64 |
| VH300062 | 1 | 0.67 | -0.37 | N/A |
| VH300063 | 2 | 0.66 | -0.40 | -0.82, 0.82 |
| VH300064 | 2 | 1.07 | 0.03 | -0.08, 0.08 |
| VH299465 | 1 | 1.02 | -1.84 | N/A |
| VH299466 | 1 | 1.09 | -0.49 | N/A |
| VH299467 | 2 | 0.76 | 0.39 | -1.20, 1.20 |
| VH299468 | 2 | 0.78 | -0.44 | 0.20, -0.20 |
| VH299469 | 2 | 0.43 | -0.04 | -2.13, 2.13 |
| VH299470 | 2 | 0.78 | -0.46 | -0.31, 0.31 |
| VH299414 | 1 | 0.86 | -1.51 | N/A |
| VH299415 | 1 | 1.12 | -0.56 | N/A |
| VH299416 | 2 | 0.63 | 0.42 | -0.68, 0.68 |
| VH299417 | 2 | 0.72 | -0.52 | 0.26, -0.26 |
| VH299419 | 2 | 0.41 | -0.17 | -2.68, 2.68 |
| VH299420 | 2 | 0.84 | -0.49 | -0.17, 0.17 |
| VH299352 | 2 | 0.51 | -0.52 | -1.21, 1.21 |
| VH299360 | 1 | 0.13 | 0.29 | N/A |
| VH299365 | 1 | 0.67 | 0.61 | N/A |
| VH324272 | 1 | 0.61 | -1.77 | N/A |
| VH324273 | 1 | 1.03 | -1.19 | N/A |
| VH324274 | 1 | 1.13 | -0.81 | N/A |
| VH299997 | 1 | 0.76 | -0.71 | N/A |
| VH299998 | 1 | 1.21 | -0.21 | N/A |
| VH299999 | 3 | 0.54 | -1.44 | -0.39, 0.74, -0.35 |
| VH300000 | 1 | 0.91 | -0.88 | N/A |
| VH300001 | 1 | 1.15 | -0.16 | N/A |
| VH299378 | 2 | 0.89 | -0.30 | -0.44, 0.44 |
| VH299379 | 3 | 0.64 | -1.55 | -0.22, 0.68, -0.46 |
| VH299380 | 1 | 1.28 | -1.08 | N/A |
| VH299381 | 2 | 0.93 | 0.09 | 0.10, -0.10 |
| VH324305 | 1 | 1.42 | -1.74 | N/A |
| VH324306 | 1 | 1.30 | -1.38 | N/A |
| VH945767 | 1 | 1.17 | -1.46 | N/A |
| VH945768 | 1 | 0.98 | -1.64 | N/A |
| VH945769 | 2 | 0.58 | -0.74 | -1.19, 1.19 |
| VH945770 | 1 | 0.87 | -0.98 | N/A |
| VH945771 | 3 | 0.54 | 0.05 | 0.48, 0.33, -0.81 |
| VH945862 | 1 | 1.12 | -1.47 | N/A |
| VH945863 | 1 | 1.04 | -1.24 | N/A |
| VH945864 | 2 | 1.09 | -1.50 | 0.49, -0.49 |
| VH945865 | 2 | 0.95 | -1.50 | 0.51, -0.51 |
| VH945866 | 2 | 0.56 | -0.56 | -1.79, 1.79 |
| VH299538 | 1 | 0.86 | 0.23 | N/A |
| VH299544 | 1 | 1.13 | -0.81 | N/A |
| VH299548 | 2 | 0.61 | 0.10 | -0.19, 0.19 |
| VH299549 | 1 | 1.35 | -0.12 | N/A |
| VH324214 | 1 | 1.01 | -1.09 | N/A |
| VH945868 | 1 | 1.06 | -1.51 | N/A |
| VH945869 | 1 | 1.07 | -1.41 | N/A |
| VH945870 | 2 | 0.89 | -1.45 | 0.65, -0.65 |
| VH945871 | 2 | 0.87 | -1.45 | 0.41, -0.41 |
| VH945872 | 2 | 0.58 | -0.58 | -1.80, 1.80 |
| VH299057 | 1 | 0.64 | -0.97 | N/A |
| VH299058 | 1 | 1.04 | -0.03 | N/A |
| VH299059 | 3 | 0.52 | -1.67 | -0.73, 0.75, -0.02 |
| VH299060 | 1 | 0.90 | -1.05 | N/A |
| VH299061 | 1 | 1.04 | -0.10 | N/A |

Table 8.A. PT Item Statistics for Grade Four—Mathematics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item ID** | **Score Points** | **A** | **B** | **D** |
| VH945874 | 1 | 1.09 | -1.19 | N/A |
| VH945875 | 1 | 0.60 | -0.70 | N/A |
| VH945876 | 2 | 0.61 | -0.66 | -0.99, 0.99 |
| VH945877 | 2 | 0.78 | -0.16 | 0.23, -0.23 |
| VH945878 | 2 | 0.81 | 0.81 | -0.03, 0.03 |
| VH299775 | 2 | 1.15 | -0.38 | 0.08, -0.08 |
| VH299776 | 2 | 0.95 | 0.08 | 0.24, -0.24 |
| VH324310 | 1 | 1.42 | -1.21 | N/A |
| VH324311 | 1 | 1.30 | -1.05 | N/A |
| VH945831 | 1 | 0.89 | -1.75 | N/A |
| VH945832 | 1 | 0.81 | -0.17 | N/A |
| VH945833 | 1 | 1.02 | 0.96 | N/A |
| VH945834 | 2 | 0.54 | -0.75 | -1.08, 1.08 |
| VH945835 | 2 | 0.59 | -0.06 | -0.32, 0.32 |
| VH300180 | 1 | 1.37 | -1.04 | N/A |
| VH300181 | 1 | 1.24 | -1.07 | N/A |
| VH300185 | 2 | 0.99 | -0.23 | 0.04, -0.04 |
| VH300188 | 2 | 0.74 | 0.94 | 0.17, -0.17 |
| VH299400 | 1 | 0.98 | 0.27 | N/A |
| VH299402 | 2 | 0.44 | 1.57 | -3.52, 3.52 |
| VH299403 | 2 | 0.69 | 0.35 | -0.67, 0.67 |
| VH299405 | 2 | 0.82 | 0.04 | -1.44, 1.44 |
| VH303281 | 1 | 0.79 | -1.26 | N/A |
| VH324307 | 2 | 0.63 | 0.55 | -1.81, 1.81 |
| VH300286 | 1 | 0.72 | -0.69 | N/A |
| VH300287 | 1 | 1.15 | -0.57 | N/A |
| VH300288 | 2 | 0.93 | 0.78 | 0.26, -0.26 |
| VH300290 | 2 | 0.78 | 0.49 | 0.18, -0.18 |
| VH300291 | 3 | 0.64 | -1.19 | 1.01, -0.62, -0.40 |
| VH299472 | 1 | 0.66 | -0.72 | N/A |
| VH299473 | 1 | 1.09 | -1.53 | N/A |
| VH299474 | 1 | 0.88 | 0.18 | N/A |
| VH299476 | 1 | 0.76 | 0.22 | N/A |
| VH299477 | 2 | 0.68 | 0.01 | 0.27, -0.27 |
| VH300004 | 1 | 0.68 | -1.41 | N/A |
| VH300005 | 2 | 0.66 | 0.45 | -1.77, 1.77 |
| VH300006 | 1 | 0.94 | 0.44 | N/A |
| VH300007 | 2 | 0.50 | 1.25 | -1.53, 1.53 |
| VH300008 | 2 | 0.57 | 0.33 | -0.86, 0.86 |
| VH300009 | 2 | 0.69 | -0.09 | -1.36, 1.36 |
| VH299100 | 1 | 1.18 | -1.21 | N/A |
| VH299101 | 1 | 0.75 | -1.68 | N/A |
| VH299103 | 2 | 0.91 | 0.80 | 0.19, -0.19 |
| VH299105 | 2 | 0.69 | 1.98 | -0.52, 0.52 |
| VH299106 | 1 | 1.00 | 0.57 | N/A |
| VH299107 | 3 | 0.77 | 0.24 | 0.56, 0.55, -1.10 |
| VH300038 | 2 | 0.63 | 0.33 | 0.02, -0.02 |
| VH300047 | 2 | 0.71 | 0.69 | -1.88, 1.88 |
| VH324275 | 1 | 0.86 | -1.33 | N/A |
| VH324276 | 1 | 0.44 | 2.15 | N/A |
| VH299823 | 2 | 1.22 | 1.05 | 0.09, -0.09 |
| VH324342 | 1 | 1.05 | -0.21 | N/A |
| VH324343 | 1 | 0.73 | -1.67 | N/A |
| VH324344 | 1 | 0.95 | 0.31 | N/A |
| VH300410 | 1 | 1.08 | 0.74 | N/A |
| VH300412 | 2 | 0.92 | -0.53 | 0.78, -0.78 |
| VH300414 | 1 | 0.60 | 0.35 | N/A |
| VH300216 | 1 | 0.70 | -0.42 | N/A |
| VH300217 | 1 | 0.87 | 0.93 | N/A |
| VH300219 | 2 | 0.79 | 0.31 | -0.27, 0.27 |
| VH324335 | 1 | 0.66 | -0.79 | N/A |
| VH299443 | 1 | 1.08 | -1.58 | N/A |
| VH299444 | 1 | 1.27 | -0.98 | N/A |
| VH299445 | 2 | 0.94 | 0.38 | 0.23, -0.23 |
| VH299446 | 2 | 0.74 | 0.68 | -0.97, 0.97 |
| VH299447 | 1 | 1.13 | 0.53 | N/A |
| VH299448 | 3 | 0.85 | -0.01 | 0.44, 0.49, -0.92 |
| VH299337 | 1 | 0.85 | -1.47 | N/A |
| VH299338 | 1 | 1.11 | -0.83 | N/A |
| VH299339 | 2 | 1.06 | 0.73 | -0.05, 0.05 |
| VH299340 | 2 | 0.74 | 0.62 | -0.66, 0.66 |
| VH299341 | 1 | 0.90 | 0.45 | N/A |
| VH299342 | 3 | 0.70 | 0.12 | 0.77, 0.26, -1.03 |
| VH299110 | 1 | 0.57 | -0.63 | N/A |
| VH299111 | 1 | 0.98 | -0.71 | N/A |
| VH299112 | 2 | 0.88 | 0.86 | 0.32, -0.32 |
| VH299113 | 2 | 0.71 | 0.65 | 0.26, -0.26 |
| VH299114 | 3 | 0.65 | -1.16 | 0.83, -0.95, 0.12 |
| VH299115 | 2 | 0.87 | 1.20 | 0.09, -0.09 |
| VH945837 | 1 | 0.74 | -0.47 | N/A |
| VH945838 | 1 | 1.25 | -1.93 | N/A |
| VH945839 | 2 | 0.68 | -0.78 | -0.02, 0.02 |
| VH945840 | 1 | 1.25 | -0.95 | N/A |
| VH945841 | 2 | 0.76 | 0.30 | 0.00, 0.00 |
| VH945842 | 2 | 0.70 | 0.10 | -0.26, 0.26 |
| VH299178 | 1 | 0.79 | -1.02 | N/A |
| VH299180 | 1 | 0.53 | 0.05 | N/A |
| VH299181 | 2 | 0.57 | 0.37 | -0.13, 0.13 |
| VH299182 | 2 | 0.60 | 0.95 | -1.77, 1.77 |
| VH300094 | 1 | 0.67 | -0.76 | N/A |
| VH300095 | 1 | 1.43 | -1.90 | N/A |
| VH300096 | 1 | 0.82 | 0.13 | N/A |
| VH300098 | 1 | 0.97 | 0.20 | N/A |
| VH300099 | 2 | 0.73 | -0.07 | 0.42, -0.42 |
| VH299934 | 2 | 1.23 | 0.65 | -0.06, 0.06 |
| VH324315 | 1 | 1.09 | -1.18 | N/A |
| VH324316 | 1 | 0.88 | -1.49 | N/A |
| VH324317 | 1 | 1.01 | 0.19 | N/A |
| VH300208 | 1 | 0.89 | -1.05 | N/A |
| VH300209 | 1 | 0.67 | -1.66 | N/A |
| VH300210 | 2 | 0.79 | 1.14 | 0.10, -0.10 |
| VH300211 | 1 | 0.88 | 1.58 | N/A |
| VH300212 | 1 | 1.02 | 0.42 | N/A |
| VH300213 | 3 | 0.82 | 0.61 | 0.64, 0.38, -1.02 |
| VH299501 | 1 | 0.63 | 0.02 | N/A |
| VH299504 | 1 | 0.87 | 0.84 | N/A |
| VH299506 | 2 | 0.80 | 0.16 | -0.18, 0.18 |
| VH299508 | 1 | 1.07 | -0.33 | N/A |
| VH299512 | 2 | 0.69 | 0.43 | -0.49, 0.49 |
| VH324382 | 1 | 0.65 | -0.75 | N/A |
| VH945818 | 1 | 0.90 | -1.45 | N/A |
| VH945819 | 1 | 0.91 | -1.67 | N/A |
| VH945820 | 1 | 1.07 | 0.38 | N/A |
| VH945821 | 2 | 0.63 | 0.82 | -0.84, 0.84 |
| VH945822 | 2 | 0.71 | -0.38 | -0.39, 0.39 |
| VH945823 | 2 | 0.68 | 0.29 | 0.43, -0.43 |

Table 8.A. PT Item Statistics for Grade Five—Mathematics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item ID** | **Score Points** | **A** | **B** | **D** |
| VH299407 | 1 | 0.75 | -1.15 | N/A |
| VH299408 | 1 | 0.60 | 0.23 | N/A |
| VH299409 | 2 | 0.58 | 0.46 | 0.45, -0.45 |
| VH299410 | 1 | 0.72 | 2.98 | N/A |
| VH299411 | 2 | 0.82 | 1.60 | -0.07, 0.07 |
| VH299412 | 3 | 0.39 | 2.13 | -0.93, 0.67, 0.26 |
| VH945825 | 1 | 0.68 | -2.10 | N/A |
| VH945826 | 1 | 0.69 | -1.12 | N/A |
| VH945827 | 2 | 0.60 | -0.07 | -0.50, 0.50 |
| VH945828 | 2 | 0.69 | 0.53 | -0.55, 0.55 |
| VH945829 | 2 | 0.56 | 0.34 | -0.60, 0.60 |
| VH300303 | 1 | 1.30 | 0.43 | N/A |
| VH300305 | 1 | 1.21 | 0.75 | N/A |
| VH300306 | 2 | 0.63 | 1.34 | -0.17, 0.17 |
| VH300307 | 2 | 1.01 | 1.84 | 0.13, -0.13 |
| VH300308 | 2 | 0.79 | 1.49 | 0.00, 0.00 |
| VH300309 | 2 | 0.42 | 0.63 | -3.01, 3.01 |
| VH299143 | 2 | 0.73 | 1.03 | -0.20, 0.20 |
| VH299151 | 2 | 0.88 | 1.73 | -0.29, 0.29 |
| VH299164 | 2 | 0.82 | 1.14 | -0.24, 0.24 |
| VH299169 | 2 | 0.37 | 0.74 | -3.58, 3.58 |
| VH324347 | 1 | 1.09 | 0.92 | N/A |
| VH324348 | 1 | 1.11 | 0.82 | N/A |
| VH945805 | 1 | 0.51 | -0.17 | N/A |
| VH945806 | 1 | 0.87 | 0.90 | N/A |
| VH945807 | 2 | 0.62 | 0.32 | -0.25, 0.25 |
| VH945808 | 1 | 0.71 | 1.79 | N/A |
| VH945809 | 2 | 0.51 | 1.49 | 0.04, -0.04 |
| VH299433 | 1 | 1.24 | 1.19 | N/A |
| VH299434 | 2 | 0.55 | 0.10 | 0.23, -0.23 |
| VH299438 | 2 | 0.77 | 1.49 | 0.45, -0.45 |
| VH324339 | 1 | 0.98 | -0.39 | N/A |
| VH324340 | 1 | 0.52 | 2.12 | N/A |
| VH299881 | 2 | 0.45 | -0.19 | -2.39, 2.39 |
| VH299884 | 2 | 0.64 | 0.76 | -0.54, 0.54 |
| VH299887 | 2 | 0.99 | 1.67 | -0.10, 0.10 |
| VH299891 | 3 | 0.74 | 1.32 | 0.19, -0.21, 0.02 |
| VH324350 | 1 | 0.69 | 1.23 | N/A |
| VH324351 | 1 | 1.14 | 1.17 | N/A |
| VH299850 | 1 | 0.56 | -1.14 | N/A |
| VH299852 | 2 | 0.69 | 0.51 | -1.94, 1.94 |
| VH299855 | 2 | 0.87 | 2.02 | -0.30, 0.30 |
| VH299857 | 2 | 0.39 | 0.95 | -0.53, 0.53 |
| VH299860 | 1 | 0.53 | 2.20 | N/A |
| VH299861 | 2 | 0.68 | 0.57 | -0.34, 0.34 |
| VH299076 | 1 | 0.79 | 0.19 | N/A |
| VH299077 | 1 | 1.20 | 0.97 | N/A |
| VH299078 | 2 | 0.68 | 1.08 | -0.66, 0.66 |
| VH299080 | 2 | 0.67 | 1.60 | 0.20, -0.20 |
| VH299081 | 3 | 0.54 | 0.90 | -0.57, -0.10, 0.67 |
| VH299082 | 2 | 0.30 | 3.94 | 1.92, -1.92 |
| VH299692 | 1 | 1.10 | 0.91 | N/A |
| VH299693 | 1 | 1.13 | 0.68 | N/A |
| VH299695 | 2 | 0.82 | 1.06 | 0.05, -0.05 |
| VH299696 | 2 | 0.91 | 1.86 | -0.12, 0.12 |
| VH299697 | 2 | 0.84 | 1.30 | 0.04, -0.04 |
| VH299699 | 2 | 0.39 | 0.83 | -3.11, 3.11 |
| VH299043 | 2 | 0.88 | 0.90 | -0.06, 0.06 |
| VH299044 | 2 | 1.14 | 1.73 | 0.11, -0.11 |
| VH299045 | 2 | 0.81 | 1.11 | -0.16, 0.16 |
| VH299046 | 2 | 0.48 | 0.86 | -2.87, 2.87 |
| VH324334 | 1 | 0.90 | 0.73 | N/A |
| VH324338 | 1 | 1.26 | 0.83 | N/A |
| VH300073 | 1 | 0.93 | 0.54 | N/A |
| VH300074 | 1 | 0.78 | -0.48 | N/A |
| VH300075 | 2 | 0.61 | 1.00 | -1.15, 1.15 |
| VH300076 | 2 | 0.71 | 1.60 | 0.43, -0.43 |
| VH300077 | 3 | 0.58 | 0.83 | -0.50, -0.33, 0.83 |
| VH300078 | 2 | 0.31 | 3.81 | 1.90, -1.90 |
| VH299680 | 1 | 1.22 | 0.67 | N/A |
| VH299683 | 2 | 0.57 | 0.13 | 0.24, -0.24 |
| VH299685 | 2 | 0.83 | 1.37 | 0.42, -0.42 |
| VH299687 | 2 | 1.20 | 2.18 | 0.20, -0.20 |
| VH324376 | 1 | 0.96 | 0.51 | N/A |
| VH324377 | 1 | 0.46 | 2.05 | N/A |
| VH299983 | 1 | 0.82 | -0.94 | N/A |
| VH299984 | 1 | 0.71 | 1.39 | N/A |
| VH299985 | 2 | 0.58 | 0.02 | 0.14, -0.14 |
| VH299987 | 2 | 0.77 | 1.52 | -0.12, 0.12 |
| VH299989 | 3 | 0.33 | 2.40 | -1.35, 0.49, 0.86 |
| VH299186 | 1 | 0.94 | -0.22 | N/A |
| VH299187 | 1 | 0.90 | 1.12 | N/A |
| VH299188 | 3 | 0.82 | 1.36 | 1.00, -1.29, 0.29 |
| VH299190 | 1 | 0.54 | 0.70 | N/A |
| VH945785 | 1 | 0.96 | -1.33 | N/A |
| VH945786 | 1 | 0.88 | -2.21 | N/A |
| VH945787 | 2 | 0.65 | 0.29 | -0.53, 0.53 |
| VH945788 | 2 | 0.73 | 0.62 | 0.58, -0.58 |
| VH945789 | 2 | 0.47 | 0.97 | -3.12, 3.12 |
| VH299594 | 2 | 0.59 | -0.49 | -1.83, 1.83 |
| VH299595 | 2 | 0.69 | 0.87 | -0.33, 0.33 |
| VH299597 | 2 | 0.83 | 1.69 | -0.15, 0.15 |
| VH299601 | 3 | 0.55 | 0.91 | -0.58, -0.54, 1.13 |
| VH324336 | 1 | 0.73 | 1.24 | N/A |
| VH324337 | 1 | 1.16 | 0.98 | N/A |
| VH945850 | 1 | 0.79 | -2.21 | N/A |
| VH945851 | 1 | 0.85 | -1.33 | N/A |
| VH945852 | 2 | 0.73 | -0.12 | -0.43, 0.43 |
| VH945853 | 2 | 0.65 | -0.97 | -0.93, 0.93 |
| VH945854 | 2 | 0.58 | 0.60 | -1.05, 1.05 |
| VH299991 | 1 | 0.70 | -0.73 | N/A |
| VH299992 | 2 | 0.54 | 0.82 | -3.35, 3.35 |
| VH299993 | 2 | 0.34 | 1.47 | -0.91, 0.91 |
| VH299994 | 2 | 0.57 | 0.99 | -0.86, 0.86 |
| VH299995 | 2 | 0.65 | 0.55 | 1.17, -1.17 |

Table 8.A. PT Item Statistics for Grade Six—Mathematics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item ID** | **Score Points** | **A** | **B** | **D** |
| VH299480 | 1 | 0.77 | 1.49 | N/A |
| VH299481 | 1 | 0.92 | 2.24 | N/A |
| VH299482 | 1 | 0.83 | 1.19 | N/A |
| VH299484 | 2 | 0.40 | -0.60 | -0.34, 0.34 |
| VH299485 | 2 | 0.51 | 0.65 | 0.39, -0.39 |
| VH299486 | 2 | 0.96 | 1.73 | -0.18, 0.18 |
| VH945799 | 1 | 0.69 | 0.49 | N/A |
| VH945800 | 1 | 0.69 | 0.23 | N/A |
| VH945801 | 2 | 0.42 | 1.59 | -0.34, 0.34 |
| VH945802 | 2 | 0.65 | 1.93 | -0.55, 0.55 |
| VH945803 | 2 | 0.61 | 2.04 | 0.07, -0.07 |
| VH299650 | 1 | 0.82 | -0.81 | N/A |
| VH299651 | 2 | 0.68 | 1.49 | -0.38, 0.38 |
| VH299652 | 2 | 0.65 | 1.39 | -0.26, 0.26 |
| VH299653 | 1 | 0.73 | -0.33 | N/A |
| VH299655 | 2 | 0.55 | 1.42 | -0.84, 0.84 |
| VH300378 | 1 | 0.77 | -0.19 | N/A |
| VH300380 | 1 | 0.70 | 0.22 | N/A |
| VH300384 | 1 | 1.01 | 0.53 | N/A |
| VH300390 | 1 | 1.29 | 0.79 | N/A |
| VH300397 | 2 | 0.60 | 1.62 | 0.95, -0.95 |
| VH321665 | 1 | 0.75 | -0.61 | N/A |
| VH945791 | 2 | 0.60 | 2.18 | 0.46, -0.46 |
| VH945792 | 1 | 0.68 | 0.13 | N/A |
| VH945793 | 1 | 0.66 | 0.25 | N/A |
| VH945795 | 2 | 0.60 | 1.47 | 0.66, -0.66 |
| VH945796 | 2 | 0.57 | 1.86 | -0.60, 0.60 |
| VH299579 | 1 | 0.75 | -0.38 | N/A |
| VH299580 | 1 | 0.74 | 0.37 | N/A |
| VH299582 | 1 | 0.98 | 0.46 | N/A |
| VH299583 | 1 | 0.69 | -0.79 | N/A |
| VH299585 | 1 | 1.19 | 0.89 | N/A |
| VH299586 | 2 | 0.41 | 2.30 | 1.11, -1.11 |
| VH953701 | 1 | 0.59 | -0.70 | N/A |
| VH953702 | 1 | 0.57 | -0.82 | N/A |
| VH953703 | 1 | 0.52 | -0.02 | N/A |
| VH953704 | 2 | 0.59 | 1.67 | -2.37, 2.37 |
| VH953705 | 2 | 0.63 | -0.00 | -0.28, 0.28 |
| VH953706 | 2 | 0.79 | 1.48 | -0.62, 0.62 |
| VH300192 | 1 | 0.81 | -0.15 | N/A |
| VH300193 | 1 | 0.71 | -0.65 | N/A |
| VH300195 | 2 | 0.51 | 2.33 | -1.15, 1.15 |
| VH300196 | 2 | 0.66 | 1.56 | -0.32, 0.32 |
| VH300197 | 1 | 1.03 | 1.55 | N/A |
| VH300198 | 2 | 0.56 | 1.88 | -0.09, 0.09 |
| VH299450 | 1 | 0.82 | 0.35 | N/A |
| VH299451 | 1 | 0.65 | -0.54 | N/A |
| VH299453 | 2 | 0.57 | 2.03 | -0.81, 0.81 |
| VH299454 | 2 | 0.63 | 1.56 | -0.32, 0.32 |
| VH299455 | 1 | 1.02 | 1.70 | N/A |
| VH299456 | 2 | 0.60 | 1.62 | -0.08, 0.08 |
| VH300200 | 1 | 0.57 | -0.19 | N/A |
| VH300201 | 1 | 0.69 | 0.24 | N/A |
| VH300202 | 1 | 0.82 | 0.50 | N/A |
| VH300204 | 1 | 0.55 | -0.79 | N/A |
| VH300205 | 2 | 0.52 | 1.47 | 1.14, -1.14 |
| VH300206 | 2 | 0.55 | 1.93 | 0.35, -0.35 |
| VH299516 | 1 | 0.79 | -0.14 | N/A |
| VH299517 | 1 | 0.61 | -0.65 | N/A |
| VH299518 | 2 | 0.69 | 1.68 | -0.19, 0.19 |
| VH299520 | 2 | 0.68 | 1.48 | -0.29, 0.29 |
| VH299521 | 1 | 1.12 | 1.63 | N/A |
| VH299522 | 2 | 0.70 | 1.78 | -0.95, 0.95 |
| VH299282 | 1 | 0.86 | 0.90 | N/A |
| VH299283 | 2 | 0.40 | -0.27 | -0.39, 0.39 |
| VH299285 | 2 | 0.61 | 0.72 | 0.28, -0.28 |
| VH299287 | 2 | 0.67 | 2.01 | -0.50, 0.50 |
| VH324186 | 1 | 1.13 | 2.08 | N/A |
| VH300109 | 2 | 0.62 | 1.72 | -0.59, 0.59 |
| VH300114 | 2 | 0.70 | 1.41 | -0.24, 0.24 |
| VH300125 | 1 | 1.08 | 1.46 | N/A |
| VH300126 | 2 | 0.76 | 1.79 | -0.48, 0.48 |
| VH324159 | 1 | 0.76 | 0.26 | N/A |
| VH324160 | 1 | 0.67 | -0.87 | N/A |
| VH299786 | 1 | 0.67 | -0.23 | N/A |
| VH299787 | 1 | 0.71 | 0.46 | N/A |
| VH299788 | 1 | 0.82 | 0.45 | N/A |
| VH299789 | 1 | 0.59 | -0.69 | N/A |
| VH299790 | 2 | 0.58 | 1.27 | 1.13, -1.13 |
| VH299792 | 2 | 0.50 | 2.21 | 0.48, -0.48 |
| VH953693 | 1 | 0.63 | -0.95 | N/A |
| VH953694 | 1 | 0.63 | -0.85 | N/A |
| VH953695 | 1 | 0.54 | -0.45 | N/A |
| VH953696 | 2 | 0.63 | 1.55 | -0.43, 0.43 |
| VH953697 | 2 | 0.44 | 0.64 | -1.37, 1.37 |
| VH953698 | 2 | 0.82 | 1.80 | -0.32, 0.32 |
| VH300153 | 2 | 0.59 | 2.14 | -0.84, 0.84 |
| VH300155 | 2 | 0.73 | 1.36 | -0.25, 0.25 |
| VH300163 | 2 | 0.71 | 1.47 | -0.74, 0.74 |
| VH303296 | 1 | 0.81 | 0.13 | N/A |
| VH324157 | 1 | 0.86 | -0.64 | N/A |
| VH324158 | 1 | 0.91 | -0.21 | N/A |

Table 8.A. PT Item Statistics for Grade Seven—Mathematics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item ID** | **Score Points** | **A** | **B** | **D** |
| VH299245 | 1 | 0.82 | 0.98 | N/A |
| VH299246 | 1 | 1.10 | 2.00 | N/A |
| VH299247 | 1 | 1.27 | 2.22 | N/A |
| VH299248 | 2 | 0.91 | 2.91 | -0.03, 0.03 |
| VH299249 | 1 | 1.40 | 2.18 | N/A |
| VH299051 | 1 | 0.65 | 0.41 | N/A |
| VH299053 | 1 | 0.79 | 2.09 | N/A |
| VH299054 | 1 | 0.15 | 2.71 | N/A |
| VH299055 | 2 | 0.69 | 1.36 | -0.07, 0.07 |
| VH299212 | 1 | 1.68 | 2.54 | N/A |
| VH299227 | 2 | 0.53 | 3.75 | 1.14, -1.14 |
| VH303301 | 2 | 0.87 | 2.32 | 0.21, -0.21 |
| VH303302 | 1 | 0.92 | 1.78 | N/A |
| VH324170 | 1 | 0.95 | 0.15 | N/A |
| VH324171 | 1 | 0.90 | 1.13 | N/A |
| VH945856 | 1 | 1.17 | 1.24 | N/A |
| VH945857 | 1 | 0.70 | 0.10 | N/A |
| VH945858 | 1 | 0.36 | 0.80 | N/A |
| VH945859 | 2 | 0.44 | 0.46 | -1.96, 1.96 |
| VH945860 | 2 | 0.59 | 0.82 | -0.28, 0.28 |
| VH300066 | 1 | 0.84 | 0.49 | N/A |
| VH300067 | 1 | 0.93 | 0.26 | N/A |
| VH300068 | 1 | 1.06 | 1.93 | N/A |
| VH300069 | 1 | 0.38 | 0.75 | N/A |
| VH300070 | 2 | 1.02 | 1.22 | 0.11, -0.11 |
| VH300071 | 2 | 0.74 | 0.99 | -0.22, 0.22 |
| VH299570 | 1 | 1.01 | 1.35 | N/A |
| VH299571 | 1 | 0.91 | 1.83 | N/A |
| VH299572 | 1 | 1.22 | 2.28 | N/A |
| VH299574 | 1 | 1.52 | 2.41 | N/A |
| VH299575 | 2 | 0.78 | 1.17 | 0.51, -0.51 |
| VH299577 | 2 | 0.36 | 2.83 | 2.66, -2.66 |
| VH300087 | 1 | 1.02 | 0.77 | N/A |
| VH300089 | 1 | 1.14 | 2.27 | N/A |
| VH300090 | 2 | 0.87 | 2.56 | -0.41, 0.41 |
| VH300091 | 2 | 0.69 | 1.32 | 0.55, -0.55 |
| VH300092 | 1 | 1.42 | 2.06 | N/A |
| VH299237 | 1 | 1.03 | 1.11 | N/A |
| VH299238 | 1 | 1.43 | 1.74 | N/A |
| VH299239 | 1 | 1.37 | 2.20 | N/A |
| VH299240 | 1 | 1.14 | 2.77 | N/A |
| VH299242 | 2 | 0.34 | 3.09 | 2.58, -2.58 |
| VH300257 | 1 | 0.41 | 0.59 | N/A |
| VH300259 | 2 | 0.82 | 1.17 | -0.05, 0.05 |
| VH324199 | 1 | 0.73 | 0.40 | N/A |
| VH324200 | 1 | 0.85 | -0.57 | N/A |
| VH324201 | 1 | 0.92 | 1.98 | N/A |
| VH299921 | 1 | 0.86 | 0.33 | N/A |
| VH299922 | 1 | 0.72 | 1.29 | N/A |
| VH299923 | 1 | 1.34 | 2.65 | N/A |
| VH299926 | 1 | 0.84 | 1.81 | N/A |
| VH299927 | 2 | 0.51 | 4.02 | 1.43, -1.43 |
| VH299073 | 1 | 0.75 | -0.86 | N/A |
| VH299074 | 1 | 1.02 | 1.88 | N/A |
| VH324172 | 1 | 0.79 | 1.20 | N/A |
| VH324173 | 1 | 0.83 | -0.57 | N/A |
| VH300318 | 1 | 1.05 | 2.83 | N/A |
| VH300320 | 2 | 0.68 | 1.20 | 0.67, -0.67 |
| VH300323 | 1 | 0.21 | 3.75 | N/A |
| VH324153 | 1 | 1.19 | 1.95 | N/A |
| VH324154 | 1 | 1.10 | 1.03 | N/A |
| VH945844 | 1 | 1.04 | 1.32 | N/A |
| VH945845 | 1 | 0.64 | 0.09 | N/A |
| VH945846 | 1 | 0.26 | 1.46 | N/A |
| VH945847 | 2 | 0.47 | 0.40 | -2.15, 2.15 |
| VH945848 | 2 | 0.63 | 1.35 | -0.59, 0.59 |
| VH300019 | 1 | 0.70 | 1.29 | N/A |
| VH300020 | 1 | 0.71 | -0.62 | N/A |
| VH300021 | 1 | 0.68 | -0.88 | N/A |
| VH300022 | 1 | 0.95 | 1.95 | N/A |
| VH299947 | 1 | 0.69 | 1.17 | N/A |
| VH299948 | 1 | 0.70 | -0.75 | N/A |
| VH299949 | 1 | 1.07 | 1.27 | N/A |
| VH299950 | 2 | 0.66 | 1.33 | 0.55, -0.55 |
| VH299952 | 1 | 1.03 | 2.10 | N/A |
| VH299953 | 2 | 0.82 | 2.33 | -0.21, 0.21 |
| VH299865 | 1 | 0.68 | 1.40 | N/A |
| VH299866 | 1 | 0.71 | -0.72 | N/A |
| VH299868 | 1 | 1.35 | 1.34 | N/A |
| VH299869 | 2 | 0.85 | 1.24 | 0.46, -0.46 |
| VH299871 | 1 | 1.30 | 2.05 | N/A |
| VH299872 | 2 | 0.82 | 2.17 | -0.45, 0.45 |
| VH300444 | 1 | 0.76 | 2.08 | N/A |
| VH300446 | 1 | 0.86 | -0.35 | N/A |
| VH300447 | 1 | 1.00 | 1.97 | N/A |
| VH300448 | 1 | 0.15 | 3.38 | N/A |
| VH300449 | 2 | 0.77 | 1.20 | -0.04, 0.04 |
| VH945900 | 1 | 0.86 | 0.07 | N/A |
| VH945901 | 1 | 0.98 | 2.17 | N/A |
| VH945902 | 2 | 0.67 | 1.76 | -0.10, 0.10 |
| VH945903 | 2 | 0.56 | 1.45 | -1.41, 1.41 |
| VH945904 | 3 | 0.51 | 2.36 | 0.12, -0.34, 0.23 |

Table 8.A. PT Item Statistics for Grade Eight—Mathematics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item ID** | **Score Points** | **A** | **B** | **D** |
| VH945887 | 1 | 0.56 | -1.32 | N/A |
| VH945888 | 1 | 0.49 | -0.29 | N/A |
| VH945889 | 2 | 0.46 | 1.44 | 0.92, -0.92 |
| VH945890 | 2 | 0.72 | 1.63 | 0.05, -0.05 |
| VH945891 | 2 | 0.50 | 1.78 | 0.73, -0.73 |
| VH299897 | 1 | 1.01 | 1.36 | N/A |
| VH299899 | 1 | 1.18 | 2.78 | N/A |
| VH299900 | 2 | 0.82 | 2.10 | 0.74, -0.74 |
| VH299901 | 2 | 0.85 | 2.40 | 0.36, -0.36 |
| VH299902 | 1 | 0.67 | 1.70 | N/A |
| VH299802 | 1 | 1.16 | 2.12 | N/A |
| VH299806 | 2 | 0.79 | 2.11 | -0.17, 0.17 |
| VH299807 | 1 | 0.99 | 1.62 | N/A |
| VH299811 | 2 | 0.86 | 2.78 | 0.02, -0.02 |
| VH324249 | 1 | 0.98 | 1.74 | N/A |
| VH299737 | 1 | 1.16 | 1.46 | N/A |
| VH299738 | 1 | 1.19 | 1.86 | N/A |
| VH299739 | 2 | 0.82 | 1.85 | -0.10, 0.10 |
| VH299741 | 2 | 0.54 | 1.49 | -0.42, 0.42 |
| VH299742 | 1 | 0.86 | 0.85 | N/A |
| VH299312 | 1 | 1.22 | 2.06 | N/A |
| VH299314 | 2 | 0.74 | 2.15 | -0.20, 0.20 |
| VH299320 | 1 | 0.96 | 1.63 | N/A |
| VH299325 | 2 | 0.78 | 3.16 | 0.06, -0.06 |
| VH324250 | 1 | 0.92 | 1.69 | N/A |
| VH945760 | 1 | 0.77 | 0.96 | N/A |
| VH945761 | 1 | 0.53 | -0.18 | N/A |
| VH945762 | 1 | 0.68 | 2.52 | N/A |
| VH945763 | 1 | 0.34 | 0.24 | N/A |
| VH945764 | 1 | 0.50 | 1.29 | N/A |
| VH945765 | 2 | 0.52 | 3.09 | -0.57, 0.57 |
| VH945779 | 1 | 0.46 | -1.57 | N/A |
| VH945780 | 1 | 0.52 | -0.20 | N/A |
| VH945781 | 2 | 0.67 | 1.59 | 0.02, -0.02 |
| VH945782 | 2 | 0.40 | 1.48 | 1.02, -1.02 |
| VH945783 | 2 | 0.48 | 1.90 | 0.85, -0.85 |
| VH300337 | 2 | 1.36 | 2.24 | 0.60, -0.60 |
| VH300340 | 1 | 0.66 | 1.67 | N/A |
| VH300345 | 2 | 0.56 | 2.50 | 0.76, -0.76 |
| VH324155 | 1 | 0.98 | 1.69 | N/A |
| VH324156 | 1 | 0.73 | 2.90 | N/A |
| VH300080 | 1 | 1.00 | 1.41 | N/A |
| VH300081 | 2 | 0.78 | 2.95 | -0.02, 0.02 |
| VH300083 | 1 | 0.95 | 1.67 | N/A |
| VH300084 | 1 | 1.20 | 2.03 | N/A |
| VH300085 | 2 | 0.47 | 0.51 | -0.32, 0.32 |
| VH300053 | 1 | 1.15 | 1.64 | N/A |
| VH300054 | 2 | 1.24 | 1.86 | 0.42, -0.42 |
| VH300055 | 2 | 0.51 | 1.49 | -0.62, 0.62 |
| VH300056 | 1 | 0.79 | 0.70 | N/A |
| VH299669 | 2 | 1.08 | 2.31 | 0.28, -0.28 |
| VH299670 | 1 | 0.71 | 1.24 | N/A |
| VH324168 | 1 | 0.92 | 1.54 | N/A |
| VH324169 | 1 | 0.73 | 2.21 | N/A |
| VH945880 | 1 | 0.51 | 0.19 | N/A |
| VH945881 | 1 | 0.74 | 2.14 | N/A |
| VH945882 | 1 | 0.66 | 2.33 | N/A |
| VH945883 | 1 | 0.42 | -2.84 | N/A |
| VH945884 | 1 | 0.37 | 1.13 | N/A |
| VH945885 | 2 | 0.51 | 2.81 | -0.95, 0.95 |
| VH299489 | 1 | 0.82 | 1.51 | N/A |
| VH299490 | 1 | 0.87 | 1.73 | N/A |
| VH299492 | 1 | 1.15 | 2.09 | N/A |
| VH299493 | 2 | 0.42 | 0.17 | 0.07, -0.07 |
| VH299494 | 2 | 0.75 | 3.27 | 0.10, -0.10 |
| VH299709 | 1 | 0.85 | 1.71 | N/A |
| VH299710 | 1 | 1.09 | 2.14 | N/A |
| VH299711 | 2 | 0.47 | -0.07 | 0.36, -0.36 |
| VH299712 | 1 | 0.88 | 1.30 | N/A |
| VH299713 | 2 | 0.57 | 2.61 | -0.53, 0.53 |
| VH299084 | 1 | 1.17 | 1.11 | N/A |
| VH299085 | 1 | 1.13 | 2.58 | N/A |
| VH299087 | 2 | 0.75 | 1.94 | 1.01, -1.01 |
| VH299088 | 1 | 0.66 | 2.49 | N/A |
| VH300242 | 1 | 0.87 | 1.71 | N/A |
| VH300243 | 1 | 1.13 | 2.10 | N/A |
| VH300245 | 2 | 0.44 | 0.03 | 0.31, -0.31 |
| VH300246 | 1 | 0.88 | 1.29 | N/A |
| VH300247 | 2 | 0.59 | 2.52 | -0.78, 0.78 |

Table 8.A. PT Item Statistics for Grade Eleven—Mathematics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item ID** | **Score Points** | **A** | **B** | **D** |
| VH300237 | 2 | 0.46 | 0.50 | 2.27, -2.27 |
| VH300238 | 1 | 1.18 | 2.95 | N/A |
| VH300239 | 2 | 0.76 | 3.55 | 0.64, -0.64 |
| VH300240 | 1 | 0.25 | 5.35 | N/A |
| VH299976 | 2 | 0.62 | 1.89 | 0.04, -0.04 |
| VH299977 | 2 | 0.34 | 3.23 | 1.99, -1.99 |
| VH299979 | 2 | 0.47 | 1.37 | -1.14, 1.14 |
| VH299980 | 2 | 0.50 | 3.21 | 0.98, -0.98 |
| VH299833 | 1 | 0.37 | 6.44 | N/A |
| VH299834 | 1 | 0.45 | 2.56 | N/A |
| VH299835 | 1 | 0.84 | 2.65 | N/A |
| VH299836 | 1 | 0.56 | 1.22 | N/A |
| VH299838 | 2 | 0.50 | 3.43 | -0.80, 0.80 |
| VH299657 | 1 | 0.94 | 1.44 | N/A |
| VH299659 | 1 | 1.11 | 3.47 | N/A |
| VH299660 | 2 | 0.55 | 4.24 | -2.44, 2.44 |
| VH299661 | 2 | 0.37 | 3.64 | -2.66, 2.66 |
| VH299662 | 3 | 0.70 | 3.15 | -0.74, 0.52, 0.22 |
| VH300173 | 1 | 1.07 | 1.38 | N/A |
| VH300174 | 1 | 0.89 | 1.88 | N/A |
| VH300176 | 1 | 0.65 | 1.93 | N/A |
| VH300177 | 2 | 0.30 | 2.52 | -2.44, 2.44 |
| VH300178 | 3 | 0.58 | 3.20 | -1.08, 0.88, 0.20 |
| VH300222 | 2 | 0.57 | 1.90 | 0.22, -0.22 |
| VH300224 | 2 | 0.34 | 2.74 | 1.97, -1.97 |
| VH300226 | 2 | 0.48 | 3.42 | 0.87, -0.87 |
| VH324183 | 2 | 0.44 | 2.87 | -0.69, 0.69 |
| VH324184 | 2 | 0.41 | 1.50 | -1.76, 1.76 |
| VH300128 | 1 | 0.70 | 1.51 | N/A |
| VH300129 | 1 | 1.28 | 3.60 | N/A |
| VH300132 | 2 | 0.37 | 3.61 | -1.90, 1.90 |
| VH300133 | 3 | 0.71 | 3.21 | -0.77, 0.15, 0.63 |
| VH299905 | 1 | 1.09 | 3.26 | N/A |
| VH299910 | 2 | 0.39 | 2.77 | -1.54, 1.54 |
| VH299912 | 3 | 0.67 | 3.08 | -1.04, 0.57, 0.48 |
| VH303311 | 2 | 0.61 | 3.61 | -1.27, 1.27 |
| VH303312 | 3 | 0.60 | 2.82 | 0.68, -2.65, 1.98 |
| VH324349 | 1 | 0.98 | 1.50 | N/A |
| VH945811 | 1 | 0.62 | 3.96 | N/A |
| VH945812 | 1 | 0.68 | 2.17 | N/A |
| VH945813 | 2 | 0.34 | 2.91 | -3.32, 3.32 |
| VH945814 | 2 | 0.62 | 3.53 | -0.25, 0.25 |
| VH945815 | 3 | 0.33 | 3.13 | 0.18, 0.52, -0.70 |
| VH299551 | 1 | 0.42 | 4.13 | N/A |
| VH299552 | 1 | 0.40 | 2.66 | N/A |
| VH299553 | 1 | 0.79 | 2.44 | N/A |
| VH299554 | 1 | 0.66 | 1.81 | N/A |
| VH299555 | 2 | 0.37 | 3.07 | -1.90, 1.90 |
| VH299383 | 1 | 0.86 | 1.38 | N/A |
| VH299384 | 1 | 0.90 | 2.41 | N/A |
| VH299385 | 1 | 0.60 | 2.04 | N/A |
| VH299386 | 2 | 0.56 | 2.90 | -1.11, 1.11 |
| VH299387 | 3 | 0.74 | 3.09 | -0.66, 0.71, -0.05 |
| VH945893 | 1 | 0.48 | 1.41 | N/A |
| VH945894 | 1 | 0.82 | 1.73 | N/A |
| VH945895 | 1 | 0.87 | 2.34 | N/A |
| VH945896 | 1 | 0.99 | 2.33 | N/A |
| VH945897 | 2 | 0.45 | 2.11 | -1.41, 1.41 |
| VH945898 | 2 | 0.40 | 1.80 | -1.50, 1.50 |
| VH953745 | 1 | 0.53 | 1.46 | N/A |
| VH953747 | 1 | 0.65 | 1.86 | N/A |
| VH953748 | 1 | 0.85 | 2.41 | N/A |
| VH953749 | 1 | 0.46 | 0.62 | N/A |
| VH953750 | 2 | 0.37 | 2.83 | -1.39, 1.39 |
| VH299956 | 1 | 1.14 | 3.30 | N/A |
| VH299958 | 2 | 0.67 | 4.05 | -1.39, 1.39 |
| VH299961 | 2 | 0.35 | 2.81 | -1.97, 1.97 |
| VH299965 | 3 | 0.75 | 3.07 | -0.83, 0.17, 0.66 |
| VH324388 | 1 | 0.83 | 1.32 | N/A |
| VH324389 | 3 | 0.47 | 2.70 | 1.01, -1.50, 0.49 |

### Appendix 8.B: Omission and Completion Analyses

**Note:** An expression that opens with a parenthesis and closes with a bracket indicates that a value is greater than the first number and is less than or equal to the second number. For example, “(0.5, 2]” indicates the omit rate is greater than 0.5 but less than or equal to 2.

Table 8.B. Percentage Omit Rates for ELA

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Section | 0 | (0, 0.5] | (0.5, 1] | (1, 5] | (5, 10] | (10, 50] | (50, 100] |
| Grade 3 PT No. of Items | 19 | 38 | N/A | N/A | N/A | N/A | N/A |
| Grade 3 PT Mean a | 0.68 | 0.65 | N/A | N/A | N/A | N/A | N/A |
| Grade 3 PT Mean b | 0.36 | -0.40 | N/A | N/A | N/A | N/A | N/A |
| Grade 3 CAT No. of Items | 712 | 151 | N/A | N/A | N/A | N/A | N/A |
| Grade 3 CAT Mean a | 0.65 | 0.69 | N/A | N/A | N/A | N/A | N/A |
| Grade 3 CAT Mean b | -0.47 | -0.78 | N/A | N/A | N/A | N/A | N/A |
| Grade 4 PT No. of Items | 22 | 44 | N/A | N/A | N/A | N/A | N/A |
| Grade 4 PT Mean a | 0.61 | 0.64 | N/A | N/A | N/A | N/A | N/A |
| Grade 4 PT Mean b | 0.35 | -0.03 | N/A | N/A | N/A | N/A | N/A |
| Grade 4 CAT No. of Items | 738 | 136 | N/A | N/A | N/A | N/A | N/A |
| Grade 4 CAT Mean a | 0.59 | 0.63 | N/A | N/A | N/A | N/A | N/A |
| Grade 4 CAT Mean b | 0.00 | -0.19 | N/A | N/A | N/A | N/A | N/A |
| Grade 5 PT No. of Items | 25 | 50 | N/A | N/A | N/A | N/A | N/A |
| Grade 5 PT Mean a | 0.65 | 0.70 | N/A | N/A | N/A | N/A | N/A |
| Grade 5 PT Mean b | 0.91 | 0.00 | N/A | N/A | N/A | N/A | N/A |
| Grade 5 CAT No. of Items | 699 | 143 | N/A | N/A | N/A | N/A | N/A |
| Grade 5 CAT Mean a | 0.60 | 0.61 | N/A | N/A | N/A | N/A | N/A |
| Grade 5 CAT Mean b | 0.34 | 0.02 | N/A | N/A | N/A | N/A | N/A |
| Grade 6 PT No. of Items | 19 | 38 | N/A | N/A | N/A | N/A | N/A |
| Grade 6 PT Mean a | 0.76 | 0.83 | N/A | N/A | N/A | N/A | N/A |
| Grade 6 PT Mean b | 1.19 | 0.26 | N/A | N/A | N/A | N/A | N/A |
| Grade 6 CAT No. of Items | 625 | 207 | N/A | N/A | N/A | N/A | N/A |
| Grade 6 CAT Mean a | 0.55 | 0.58 | N/A | N/A | N/A | N/A | N/A |
| Grade 6 CAT Mean b | 0.92 | 0.37 | N/A | N/A | N/A | N/A | N/A |
| Grade 7 PT No. of Items | 24 | 48 | N/A | N/A | N/A | N/A | N/A |
| Grade 7 PT Mean a | 0.75 | 0.85 | N/A | N/A | N/A | N/A | N/A |
| Grade 7 PT Mean b | 1.47 | 0.54 | N/A | N/A | N/A | N/A | N/A |
| Grade 7 CAT No. of Items | 578 | 182 | N/A | N/A | N/A | N/A | N/A |
| Grade 7 CAT Mean a | 0.53 | 0.54 | N/A | N/A | N/A | N/A | N/A |
| Grade 7 CAT Mean b | 1.20 | 0.75 | N/A | N/A | N/A | N/A | N/A |
| Grade 8 PT No. of Items | 25 | 50 | N/A | N/A | N/A | N/A | N/A |
| Grade 8 PT Mean a | 0.66 | 0.72 | N/A | N/A | N/A | N/A | N/A |
| Grade 8 PT Mean b | 1.88 | 0.45 | N/A | N/A | N/A | N/A | N/A |
| Grade 8 CAT No. of Items | 589 | 215 | N/A | 1 | N/A | N/A | N/A |
| Grade 8 CAT Mean a | 0.52 | 0.57 | N/A | 0.92 | N/A | N/A | N/A |
| Grade 8 CAT Mean b | 1.27 | 0.90 | N/A | -0.49 | N/A | N/A | N/A |
| Grade 11 PT No. of Items | 28 | 56 | N/A | N/A | N/A | N/A | N/A |
| Grade 11 PT Mean a | 0.60 | 0.59 | N/A | N/A | N/A | N/A | N/A |
| Grade 11 PT Mean b | 1.78 | 1.26 | N/A | N/A | N/A | N/A | N/A |
| Grade 11 CAT No. of Items | 1,979 | 549 | 2 | N/A | N/A | 1 | N/A |
| Grade 11 CAT Mean a | 0.48 | 0.52 | 0.52 | N/A | N/A | 0.42 | N/A |
| Grade 11 CAT Mean b | 1.81 | 1.39 | 2.16 | N/A | N/A | 2.53 | N/A |

Table 8.B. Percentage Omit Rates for Mathematics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Section | 0 | (0, 0.5] | (0.5, 1] | (1, 5] | (5, 10] | (10, 50] | (50, 100] |
| Grade 3 PT No. of Items | 17 | 78 | N/A | N/A | N/A | N/A | N/A |
| Grade 3 PT Mean a | 1.06 | 0.85 | N/A | N/A | N/A | N/A | N/A |
| Grade 3 PT Mean b | -1.33 | -0.51 | N/A | N/A | N/A | N/A | N/A |
| Grade 3 CAT No. of Items | 1,158 | 77 | N/A | N/A | N/A | N/A | N/A |
| Grade 3 CAT Mean a | 0.83 | 0.79 | N/A | N/A | N/A | N/A | N/A |
| Grade 3 CAT Mean b | -0.76 | -1.25 | N/A | N/A | N/A | N/A | N/A |
| Grade 4 PT No. of Items | 28 | 88 | N/A | N/A | N/A | N/A | N/A |
| Grade 4 PT Mean a | 0.93 | 0.82 | N/A | N/A | N/A | N/A | N/A |
| Grade 4 PT Mean b | -0.90 | 0.12 | N/A | N/A | N/A | N/A | N/A |
| Grade 4 CAT No. of Items | 1,252 | 85 | N/A | N/A | N/A | N/A | N/A |
| Grade 4 CAT Mean a | 0.82 | 0.80 | N/A | N/A | N/A | N/A | N/A |
| Grade 4 CAT Mean b | -0.10 | -0.39 | N/A | N/A | N/A | N/A | N/A |
| Grade 5 PT No. of Items | 20 | 85 | N/A | N/A | N/A | N/A | N/A |
| Grade 5 PT Mean a | 0.85 | 0.72 | N/A | N/A | N/A | N/A | N/A |
| Grade 5 PT Mean b | -0.29 | 1.04 | N/A | N/A | N/A | N/A | N/A |
| Grade 5 CAT No. of Items | 1,190 | 117 | N/A | N/A | N/A | N/A | N/A |
| Grade 5 CAT Mean a | 0.76 | 0.75 | N/A | N/A | N/A | N/A | N/A |
| Grade 5 CAT Mean b | 0.52 | -0.01 | N/A | N/A | N/A | N/A | N/A |
| Grade 6 PT No. of Items | 8 | 84 | N/A | N/A | N/A | N/A | N/A |
| Grade 6 PT Mean a | 0.72 | 0.70 | N/A | N/A | N/A | N/A | N/A |
| Grade 6 PT Mean b | -0.17 | 0.87 | N/A | N/A | N/A | N/A | N/A |
| Grade 6 CAT No. of Items | 1,035 | 132 | N/A | N/A | N/A | N/A | N/A |
| Grade 6 CAT Mean a | 0.69 | 0.65 | N/A | N/A | N/A | N/A | N/A |
| Grade 6 CAT Mean b | 1.18 | 0.31 | N/A | N/A | N/A | N/A | N/A |
| Grade 7 PT No. of Items | 10 | 82 | N/A | N/A | N/A | N/A | N/A |
| Grade 7 PT Mean a | 0.82 | 0.85 | N/A | N/A | N/A | N/A | N/A |
| Grade 7 PT Mean b | 1.15 | 1.48 | N/A | N/A | N/A | N/A | N/A |
| Grade 7 CAT No. of Items | 899 | 157 | N/A | N/A | N/A | N/A | N/A |
| Grade 7 CAT Mean a | 0.72 | 0.69 | N/A | N/A | N/A | N/A | N/A |
| Grade 7 CAT Mean b | 1.99 | 1.01 | N/A | N/A | N/A | N/A | N/A |
| Grade 8 PT No. of Items | 5 | 74 | N/A | N/A | N/A | N/A | N/A |
| Grade 8 PT Mean a | 0.69 | 0.79 | N/A | N/A | N/A | N/A | N/A |
| Grade 8 PT Mean b | -0.29 | 1.69 | N/A | N/A | N/A | N/A | N/A |
| Grade 8 CAT No. of Items | 765 | 163 | N/A | N/A | N/A | N/A | N/A |
| Grade 8 CAT Mean a | 0.58 | 0.56 | N/A | N/A | N/A | N/A | N/A |
| Grade 8 CAT Mean b | 2.49 | 1.01 | N/A | N/A | N/A | N/A | N/A |
| Grade 11 PT No. of Items | 6 | 64 | N/A | N/A | N/A | N/A | N/A |
| Grade 11 PT Mean a | 0.67 | 0.63 | N/A | N/A | N/A | N/A | N/A |
| Grade 11 PT Mean b | 1.87 | 2.74 | N/A | N/A | N/A | N/A | N/A |
| Grade 11 CAT No. of Items | 2,362 | 246 | 1 | N/A | N/A | N/A | N/A |
| Grade 11 CAT Mean a | 0.58 | 0.56 | 0.11 | N/A | N/A | N/A | N/A |
| Grade 11 CAT Mean b | 2.65 | 1.78 | 4.48 | N/A | N/A | N/A | N/A |

Table 8.B. Item Completion, ELA

|  |  |  |
| --- | --- | --- |
| Score | % Completion | Total N of Students |
| Grade 3 Overall | 100.00% | 442,642 |
| Grade 3 Claim 1 | 99.97% | 442,493 |
| Grade 3 Claim 2 | 99.90% | 442,187 |
| Grade 3 Claim 3 | 99.97% | 442,506 |
| Grade 3 Claim 4 | 99.95% | 442,412 |
| Grade 3 PT | 100.00% | 440,185 |
| Grade 3 Non-PT | 100.00% | 442,642 |
| Grade 4 Overall | 100.00% | 435,306 |
| Grade 4 Claim 1 | 99.98% | 435,202 |
| Grade 4 Claim 2 | 99.92% | 434,943 |
| Grade 4 Claim 3 | 99.97% | 435,197 |
| Grade 4Claim 4 | 99.96% | 435,136 |
| Grade 4 PT | 100.00% | 432,985 |
| Grade 4 Non-PT | 100.00% | 435,306 |
| Grade 5 Overall | 100.00% | 454,550 |
| Grade 5 Claim 1 | 99.98% | 454,437 |
| Grade 5 Claim 2 | 99.91% | 454,163 |
| Grade 5 Claim 3 | 99.96% | 454,350 |
| Grade 5 Claim 4 | 99.96% | 454,346 |
| Grade 5 PT | 100.00% | 452,336 |
| Grade 5 Non-PT | 100.00% | 454,550 |
| Grade 6 Overall | 100.00% | 457,406 |
| Grade 6 Claim 1 | 99.92% | 457,025 |
| Grade 6 Claim 2 | 99.87% | 456,817 |
| Grade 6 Claim 3 | 99.92% | 457,046 |
| Grade 6 Claim 4 | 99.92% | 457,039 |
| Grade 6 PT | 100.00% | 452,190 |
| Grade 6 Non-PT | 100.00% | 457,406 |
| Grade 7 Overall | 100.00% | 471,492 |
| Grade 7 Claim 1 | 99.90% | 471,007 |
| Grade 7 Claim 2 | 99.84% | 470,745 |
| Grade 7 Claim 3 | 99.92% | 471,132 |
| Grade 7 Claim 4 | 99.90% | 471,025 |
| Grade 7 PT | 100.00% | 467,448 |
| Grade 7 Non-PT | 100.00% | 471,492 |
| Grade 8 Overall | 100.00% | 461,465 |
| Grade 8 Claim 1 | 99.90% | 461,002 |
| Grade 8 Claim 2 | 99.84% | 460,747 |
| Grade 8 Claim 3 | 99.91% | 461,053 |
| Grade 8 Claim 4 | 99.88% | 460,901 |
| Grade 8 PT | 100.00% | 459,505 |
| Grade 8 Non-PT | 100.00% | 461,465 |
| Grade 11 Overall | 100.00% | 439,940 |
| Grade 11 Claim 1 | 99.85% | 439,297 |
| Grade 11 Claim 2 | 99.69% | 438,566 |
| Grade 11 Claim 3 | 99.87% | 439,370 |
| Grade 11 Claim 4 | 99.79% | 439,031 |
| Grade 11 PT | 100.00% | 437,677 |
| Grade 11 Non-PT | 100.00% | 439,940 |

Table 8.B. Item Completion, Mathematics

|  |  |  |
| --- | --- | --- |
| Score | % Completion | Total N of Students |
| Grade 3 Overall | 100.00% | 444,850 |
| Grade 3 Claim 1 | 99.98% | 444,756 |
| Grade 3 Claim 2 | 99.98% | 444,766 |
| Grade 3 Claim 3 | 99.96% | 444,693 |
| Grade 3 PT | 100.00% | 440,612 |
| Grade 3 Non-PT | 100.00% | 444,850 |
| Grade 4 Overall | 100.00% | 437,397 |
| Grade 4 Claim 1 | 99.98% | 437,293 |
| Grade 4 Claim 2 | 99.98% | 437,307 |
| Grade 4 Claim 3 | 99.97% | 437,253 |
| Grade 4 PT | 100.00% | 432,877 |
| Grade 4 Non-PT | 100.00% | 437,397 |
| Grade 5 Overall | 100.00% | 456,330 |
| Grade 5 Claim 1 | 99.97% | 456,203 |
| Grade 5 Claim 2 | 99.98% | 456,235 |
| Grade 5 Claim 3 | 99.96% | 456,161 |
| Grade 5 PT | 100.00% | 452,033 |
| Grade 5 Non-PT | 100.00% | 456,330 |
| Grade 6 Overall | 100.00% | 458,991 |
| Grade 6 Claim 1 | 99.93% | 458,681 |
| Grade 6 Claim 2 | 99.99% | 458,954 |
| Grade 6 Claim 3 | 99.97% | 458,847 |
| Grade 6 PT | 100.00% | 452,382 |
| Grade 6 Non-PT | 100.00% | 458,991 |
| Grade 7 Overall | 100.00% | 472,974 |
| Grade 7 Claim 1 | 99.91% | 472,557 |
| Grade 7 Claim 2 | 99.98% | 472,886 |
| Grade 7 Claim 3 | 99.95% | 472,738 |
| Grade 7 PT | 100.00% | 467,804 |
| Grade 7 Non-PT | 100.00% | 472,974 |
| Grade 8 Overall | 100.00% | 462,224 |
| Grade 8 Claim 1 | 99.90% | 461,743 |
| Grade 8 Claim 2 | 99.95% | 462,005 |
| Grade 8 Claim 3 | 99.92% | 461,850 |
| Grade 8 PT | 100.00% | 458,921 |
| Grade 8 Non-PT | 100.00% | 462,224 |
| Grade 11 Overall | 100.00% | 438,099 |
| Grade 11 Claim 1 | 99.91% | 437,711 |
| Grade 11 Claim 2 | 99.88% | 437,575 |
| Grade 11 Claim 3 | 99.96% | 437,909 |
| Grade 11 PT | 100.00% | 434,831 |
| Grade 11 Non-PT | 100.00% | 438,099 |

### Appendix 8.C: Item Exposure

**Note:** Only the frequencies of the operational items are presented in these tables.

Table 8.C. Item Exposure Frequency—ELA

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **Frequency = 0** | **1 ≤ Frequency < 100** | **100 ≤ Frequency < 500** | **500 ≤ Frequency < 1000** | **1000 ≤ Frequency < 3000** | **Frequency ≥ 3000** |
| Grade 3 Overall | 935 | 15 | 9 | 8 | 87 | 59 | 757 |
| Grade 3 Claim 1 | 317 | 14 | 6 | 7 | 15 | 29 | 246 |
| Grade 3 Claim 2 | 275 | 1 | 2 | N/A | 21 | 20 | 231 |
| Grade 3 Claim 3 | 186 | N/A | N/A | N/A | 51 | 9 | 126 |
| Grade 3 Claim 4 | 157 | N/A | 1 | 1 | N/A | 1 | 154 |
| Grade 4 Overall | 980 | 40 | 14 | 13 | 12 | 77 | 824 |
| Grade 4 Claim 1 | 279 | 22 | 6 | 13 | 6 | 32 | 200 |
| Grade 4 Claim 2 | 310 | 10 | 6 | N/A | 6 | 37 | 251 |
| Grade 4 Claim 3 | 204 | 3 | N/A | N/A | N/A | N/A | 201 |
| Grade 4 Claim 4 | 187 | 5 | 2 | N/A | N/A | 8 | 172 |
| Grade 5 Overall | 996 | 79 | 18 | 27 | 130 | 149 | 593 |
| Grade 5 Claim 1 | 324 | 44 | 12 | 27 | 50 | 70 | 121 |
| Grade 5 Claim 2 | 322 | 27 | 1 | N/A | 24 | 40 | 230 |
| Grade 5 Claim 3 | 171 | 6 | 2 | N/A | 56 | 38 | 69 |
| Grade 5 Claim 4 | 179 | 2 | 3 | N/A | N/A | 1 | 173 |
| Grade 6 Overall | 981 | 92 | 9 | 20 | 179 | 43 | 638 |
| Grade 6 Claim 1 | 283 | 66 | 2 | 15 | 55 | 6 | 139 |
| Grade 6 Claim 2 | 326 | 19 | N/A | N/A | 31 | 26 | 250 |
| Grade 6 Claim 3 | 178 | 2 | 5 | 5 | 93 | 7 | 66 |
| Grade 6 Claim 4 | 194 | 5 | 2 | N/A | N/A | 4 | 183 |
| Grade 7 Overall | 930 | 98 | 32 | 19 | 9 | 261 | 511 |
| Grade 7 Claim 1 | 277 | 61 | 22 | 11 | 7 | 57 | 119 |
| Grade 7 Claim 2 | 324 | 26 | 1 | 1 | 2 | 68 | 226 |
| Grade 7 Claim 3 | 179 | 4 | 8 | 6 | N/A | 121 | 40 |
| Grade 7 Claim 4 | 150 | 7 | 1 | 1 | N/A | 15 | 126 |
| Grade 8 Overall | 1,005 | 125 | 23 | 11 | 58 | 149 | 639 |
| Grade 8 Claim 1 | 284 | 67 | 15 | 8 | 35 | 9 | 150 |
| Grade 8 Claim 2 | 354 | 30 | 5 | 3 | 2 | 78 | 236 |
| Grade 8 Claim 3 | 215 | 24 | 1 | N/A | 18 | 58 | 114 |
| Grade 8 Claim 4 | 152 | 4 | 2 | N/A | 3 | 4 | 139 |
| Grade 11 Overall | 2,768 | 153 | 59 | 747 | 124 | 436 | 1,249 |
| Grade 11 Claim 1 | 905 | 108 | 50 | 225 | 55 | 97 | 370 |
| Grade 11 Claim 2 | 831 | 29 | 4 | 95 | 58 | 301 | 344 |
| Grade 11 Claim 3 | 607 | 10 | 1 | 398 | 6 | 9 | 183 |
| Grade 11 Claim 4 | 425 | 6 | 4 | 29 | 5 | 29 | 352 |

Table 8.C. Item Exposure Frequency—Mathematics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **Frequency = 0** | **1 ≤ Frequency < 100** | **100 ≤ Frequency < 500** | **500 ≤ Frequency < 1000** | **1000 ≤ Frequency < 3000** | **Frequency ≥ 3000** |
| Grade 3 Overall | 1,333 | 3 | 1 | 172 | 106 | 210 | 841 |
| Grade 3 Claim 1 | 809 | N/A | N/A | 105 | 60 | 157 | 487 |
| Grade 3 Claim 2 | 283 | 3 | 1 | 26 | 34 | 38 | 181 |
| Grade 3 Claim 3 | 241 | N/A | N/A | 41 | 12 | 15 | 173 |
| Grade 4 Overall | 1,469 | 16 | 1 | 11 | 16 | 161 | 1,264 |
| Grade 4 Claim 1 | 889 | 16 | 1 | N/A | N/A | 70 | 802 |
| Grade 4 Claim 2 | 323 | N/A | N/A | 8 | 7 | 65 | 243 |
| Grade 4 Claim 3 | 257 | N/A | N/A | 3 | 9 | 26 | 219 |
| Grade 5 Overall | 1,431 | 19 | 11 | 18 | 32 | 190 | 1,161 |
| Grade 5 Claim 1 | 874 | 16 | 10 | 2 | 2 | 130 | 714 |
| Grade 5 Claim 2 | 303 | 2 | N/A | 5 | 20 | 43 | 233 |
| Grade 5 Claim 3 | 254 | 1 | 1 | 11 | 10 | 17 | 214 |
| Grade 6 Overall | 1,259 | N/A | N/A | N/A | 49 | 248 | 962 |
| Grade 6 Claim 1 | 797 | N/A | N/A | N/A | 23 | 178 | 596 |
| Grade 6 Claim 2 | 239 | N/A | N/A | N/A | 6 | 46 | 187 |
| Grade 6 Claim 3 | 223 | N/A | N/A | N/A | 20 | 24 | 179 |
| Grade 7 Overall | 1,148 | N/A | N/A | N/A | 84 | 244 | 820 |
| Grade 7 Claim 1 | 721 | N/A | N/A | N/A | 27 | 196 | 498 |
| Grade 7 Claim 2 | 250 | N/A | N/A | N/A | 37 | 23 | 190 |
| Grade 7 Claim 3 | 177 | N/A | N/A | N/A | 20 | 25 | 132 |
| Grade 8 Overall | 1,008 | 1 | N/A | 1 | 120 | 152 | 734 |
| Grade 8 Claim 1 | 657 | 1 | N/A | 1 | 44 | 89 | 522 |
| Grade 8 Claim 2 | 186 | N/A | N/A | N/A | 43 | 27 | 116 |
| Grade 8 Claim 3 | 165 | N/A | N/A | N/A | 33 | 36 | 96 |
| Grade 11 Overall | 2,680 | 1 | N/A | 449 | 428 | 806 | 996 |
| Grade 11 Claim 1 | 1,855 | 1 | N/A | 203 | 369 | 693 | 589 |
| Grade 11 Claim 2 | 396 | N/A | N/A | 196 | 23 | 34 | 143 |
| Grade 11 Claim 3 | 429 | N/A | N/A | 50 | 36 | 79 | 264 |

Table 8.C. Conditional Exposure by Difficulty for Grade Three—ELA

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***b*-value** | **No. of Items** | **Frequency = 0** | **1 ≤ Frequency < 100** | **100 ≤ Frequency < 500** | **500 ≤ Frequency < 1000** | **1000 ≤ Frequency < 3000** | **Frequency ≥ 3000** |
| > 6.0 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (5.5, 6.0] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (5.0, 5.5] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (4.5, 5.0] | 1 | 1 | N/A | N/A | N/A | N/A | N/A |
| (4.0, 4.5] | 1 | N/A | N/A | N/A | N/A | 1 | N/A |
| (3.5, 4.0] | 2 | N/A | 1 | N/A | 1 | N/A | N/A |
| (3.0, 3.5] | 1 | N/A | N/A | N/A | 1 | N/A | N/A |
| (2.5, 3.0] | 4 | 1 | N/A | N/A | 1 | 1 | 1 |
| (2.0, 2.5] | 8 | N/A | N/A | N/A | 1 | 2 | 5 |
| (1.5, 2.0] | 20 | N/A | N/A | N/A | 7 | 1 | 12 |
| (1.0, 1.5] | 44 | N/A | 1 | 1 | 3 | 5 | 34 |
| (0.5, 1.0] | 87 | N/A | N/A | N/A | 11 | 1 | 75 |
| (0, 0.5] | 125 | 2 | 1 | N/A | 12 | 4 | 106 |
| (-0.5, 0] | 147 | 2 | 3 | N/A | 10 | 6 | 126 |
| (-1.0, -0.5] | 154 | 2 | N/A | 3 | 7 | 13 | 129 |
| (-1.5, -1.0] | 155 | 3 | 3 | 2 | 12 | 7 | 128 |
| (-2.0, -1.5] | 133 | 3 | N/A | 1 | 16 | 13 | 100 |
| (-2.5, -2.0] | 46 | 1 | N/A | 1 | 3 | 5 | 36 |
| (-3.0, -2.5] | 7 | N/A | N/A | N/A | 2 | N/A | 5 |
| (-3.5, -3.0] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| < = -3.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.C. Conditional Exposure by Difficulty for Grade Four—ELA

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***b*-value** | **No. of Items** | **Frequency = 0** | **1 ≤ Frequency < 100** | **100 ≤ Frequency < 500** | **500 ≤ Frequency < 1000** | **1000 ≤ Frequency < 3000** | **Frequency ≥ 3000** |
| > 6.0 | 1 | N/A | N/A | N/A | N/A | N/A | 1 |
| (5.5, 6.0] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (5.0, 5.5] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (4.5, 5.0] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (4.0, 4.5] | 1 | N/A | N/A | N/A | N/A | N/A | 1 |
| (3.5, 4.0] | 5 | N/A | N/A | N/A | N/A | 1 | 4 |
| (3.0, 3.5] | 7 | N/A | N/A | N/A | 1 | 3 | 3 |
| (2.5, 3.0] | 19 | 1 | N/A | 1 | N/A | 5 | 12 |
| (2.0, 2.5] | 31 | 1 | N/A | N/A | 1 | 1 | 28 |
| (1.5, 2.0] | 53 | N/A | 2 | 1 | 1 | 5 | 44 |
| (1.0, 1.5] | 84 | 1 | N/A | 4 | N/A | 3 | 76 |
| (0.5, 1.0] | 105 | 3 | N/A | 1 | 1 | 4 | 96 |
| (0, 0.5] | 146 | 4 | 1 | 1 | 4 | 11 | 125 |
| (-0.5, 0] | 153 | 5 | 3 | 2 | 1 | 9 | 133 |
| (-1.0, -0.5] | 128 | 3 | 1 | 1 | N/A | 8 | 115 |
| (-1.5, -1.0] | 122 | 10 | 3 | N/A | 3 | 12 | 94 |
| (-2.0, -1.5] | 75 | 8 | 1 | 1 | N/A | 4 | 61 |
| (-2.5, -2.0] | 40 | 2 | 3 | 1 | N/A | 10 | 24 |
| (-3.0, -2.5] | 9 | 2 | N/A | N/A | N/A | 1 | 6 |
| (-3.5, -3.0] | 1 | N/A | N/A | N/A | N/A | N/A | 1 |
| < = -3.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.C. Conditional Exposure by Difficulty for Grade Five—ELA

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***b*-value** | **No. of Items** | **Frequency = 0** | **1 ≤ Frequency < 100** | **100 ≤ Frequency < 500** | **500 ≤ Frequency < 1000** | **1000 ≤ Frequency < 3000** | **Frequency ≥ 3000** |
| > 6.0 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (5.5, 6.0] | 1 | N/A | N/A | N/A | N/A | N/A | 1 |
| (5.0, 5.5] | 2 | N/A | N/A | N/A | N/A | 1 | 1 |
| (4.5, 5.0] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (4.0, 4.5] | 3 | N/A | N/A | 1 | N/A | 1 | 1 |
| (3.5, 4.0] | 6 | N/A | N/A | 1 | N/A | 4 | 1 |
| (3.0, 3.5] | 9 | 1 | N/A | N/A | 3 | 3 | 2 |
| (2.5, 3.0] | 22 | N/A | N/A | 3 | 4 | 7 | 8 |
| (2.0, 2.5] | 54 | 1 | 1 | 5 | 13 | 8 | 26 |
| (1.5, 2.0] | 71 | 1 | 2 | 5 | 10 | 13 | 40 |
| (1.0, 1.5] | 99 | 2 | 3 | 4 | 10 | 15 | 65 |
| (0.5, 1.0] | 128 | 3 | 2 | 3 | 15 | 16 | 89 |
| (0, 0.5] | 134 | 6 | 5 | 3 | 14 | 18 | 88 |
| (-0.5, 0] | 143 | 11 | 2 | 1 | 25 | 19 | 85 |
| (-1.0, -0.5] | 126 | 11 | 1 | N/A | 15 | 18 | 81 |
| (-1.5, -1.0] | 100 | 10 | 1 | 1 | 11 | 21 | 56 |
| (-2.0, -1.5] | 54 | 13 | N/A | N/A | 7 | 1 | 33 |
| (-2.5, -2.0] | 37 | 17 | 1 | N/A | 3 | 2 | 14 |
| (-3.0, -2.5] | 6 | 3 | N/A | N/A | N/A | 1 | 2 |
| (-3.5, -3.0] | 1 | N/A | N/A | N/A | N/A | 1 | N/A |
| < = -3.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.C. Conditional Exposure by Difficulty for Grade Six—ELA

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***b*-value** | **No. of Items** | **Frequency = 0** | **1 ≤ Frequency < 100** | **100 ≤ Frequency < 500** | **500 ≤ Frequency < 1000** | **1000 ≤ Frequency < 3000** | **Frequency ≥ 3000** |
| > 6.0 | 1 | N/A | N/A | N/A | N/A | N/A | 1 |
| (5.5, 6.0] | 1 | N/A | N/A | N/A | 1 | N/A | N/A |
| (5.0, 5.5] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (4.5, 5.0] | 4 | N/A | N/A | N/A | 1 | N/A | 3 |
| (4.0, 4.5] | 9 | N/A | N/A | N/A | 3 | 5 | 1 |
| (3.5, 4.0] | 12 | N/A | N/A | 1 | 3 | 5 | 3 |
| (3.0, 3.5] | 21 | N/A | 1 | N/A | 5 | 5 | 10 |
| (2.5, 3.0] | 49 | 7 | N/A | 2 | 6 | 10 | 24 |
| (2.0, 2.5] | 73 | 9 | N/A | 2 | 14 | 7 | 41 |
| (1.5, 2.0] | 116 | 18 | N/A | 5 | 14 | 3 | 76 |
| (1.0, 1.5] | 134 | 6 | N/A | 1 | 24 | N/A | 103 |
| (0.5, 1.0] | 132 | 3 | 1 | N/A | 31 | 1 | 96 |
| (0, 0.5] | 111 | 9 | 2 | 3 | 20 | 2 | 75 |
| (-0.5, 0] | 119 | 8 | 2 | 1 | 18 | 2 | 88 |
| (-1.0, -0.5] | 92 | 7 | 2 | 4 | 27 | 1 | 51 |
| (-1.5, -1.0] | 69 | 12 | N/A | 1 | 8 | 1 | 47 |
| (-2.0, -1.5] | 21 | 7 | N/A | N/A | 3 | N/A | 11 |
| (-2.5, -2.0] | 14 | 6 | 1 | N/A | N/A | N/A | 7 |
| (-3.0, -2.5] | 2 | N/A | N/A | N/A | 1 | N/A | 1 |
| (-3.5, -3.0] | 1 | N/A | N/A | N/A | N/A | 1 | N/A |
| < = -3.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.C. Conditional Exposure by Difficulty for Grade Seven—ELA

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***b*-value** | **No. of Items** | **Frequency = 0** | **1 ≤ Frequency < 100** | **100 ≤ Frequency < 500** | **500 ≤ Frequency < 1000** | **1000 ≤ Frequency < 3000** | **Frequency ≥ 3000** |
| > 6.0 | 2 | 1 | N/A | N/A | N/A | 1 | N/A |
| (5.5, 6.0] | 5 | N/A | 1 | 1 | N/A | 3 | N/A |
| (5.0, 5.5] | 4 | 1 | N/A | N/A | N/A | 3 | N/A |
| (4.5, 5.0] | 7 | N/A | 1 | N/A | N/A | 4 | 2 |
| (4.0, 4.5] | 11 | N/A | N/A | N/A | N/A | 9 | 2 |
| (3.5, 4.0] | 23 | 1 | N/A | 2 | N/A | 17 | 3 |
| (3.0, 3.5] | 28 | N/A | N/A | 2 | 1 | 15 | 10 |
| (2.5, 3.0] | 45 | 5 | 4 | N/A | N/A | 21 | 15 |
| (2.0, 2.5] | 88 | 15 | 6 | 1 | N/A | 19 | 47 |
| (1.5, 2.0] | 124 | 14 | 6 | 1 | N/A | 24 | 79 |
| (1.0, 1.5] | 135 | 5 | 1 | 2 | 1 | 25 | 101 |
| (0.5, 1.0] | 108 | 4 | 5 | 1 | 2 | 27 | 69 |
| (0, 0.5] | 106 | 7 | 2 | 2 | N/A | 31 | 64 |
| (-0.5, 0] | 108 | 13 | 2 | 3 | 1 | 28 | 61 |
| (-1.0, -0.5] | 61 | 15 | 3 | 2 | 1 | 15 | 25 |
| (-1.5, -1.0] | 54 | 11 | 1 | 2 | 2 | 11 | 27 |
| (-2.0, -1.5] | 16 | 4 | N/A | N/A | 1 | 8 | 3 |
| (-2.5, -2.0] | 4 | 1 | N/A | N/A | N/A | N/A | 3 |
| (-3.0, -2.5] | 1 | 1 | N/A | N/A | N/A | N/A | N/A |
| (-3.5, -3.0] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| < = -3.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.C. Conditional Exposure by Difficulty for Grade Eight—ELA

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***b*-value** | **No. of Items** | **Frequency = 0** | **1 ≤ Frequency < 100** | **100 ≤ Frequency < 500** | **500 ≤ Frequency < 1000** | **1000 ≤ Frequency < 3000** | **Frequency ≥ 3000** |
| > 6.0 | 2 | N/A | N/A | N/A | N/A | 1 | 1 |
| (5.5, 6.0] | 1 | N/A | N/A | N/A | 1 | N/A | N/A |
| (5.0, 5.5] | 2 | N/A | N/A | N/A | 1 | N/A | 1 |
| (4.5, 5.0] | 4 | N/A | N/A | N/A | 3 | N/A | 1 |
| (4.0, 4.5] | 12 | 1 | 1 | 1 | 1 | 6 | 2 |
| (3.5, 4.0] | 29 | 4 | 1 | 1 | 2 | 11 | 10 |
| (3.0, 3.5] | 41 | 3 | 1 | N/A | 3 | 16 | 18 |
| (2.5, 3.0] | 68 | 9 | 5 | N/A | 5 | 18 | 31 |
| (2.0, 2.5] | 96 | 11 | 3 | 1 | 3 | 17 | 61 |
| (1.5, 2.0] | 138 | 16 | 1 | N/A | 7 | 14 | 100 |
| (1.0, 1.5] | 133 | 12 | 1 | 2 | 5 | 12 | 101 |
| (0.5, 1.0] | 114 | 8 | 5 | 1 | 7 | 5 | 88 |
| (0, 0.5] | 104 | 12 | N/A | 1 | 9 | 15 | 67 |
| (-0.5, 0] | 145 | 17 | 2 | 1 | 7 | 12 | 106 |
| (-1.0, -0.5] | 63 | 18 | 2 | N/A | 2 | 9 | 32 |
| (-1.5, -1.0] | 35 | 8 | 1 | 2 | 1 | 9 | 14 |
| (-2.0, -1.5] | 13 | 5 | N/A | 1 | 1 | 2 | 4 |
| (-2.5, -2.0] | 3 | N/A | N/A | N/A | N/A | 2 | 1 |
| (-3.0, -2.5] | 1 | 1 | N/A | N/A | N/A | N/A | N/A |
| (-3.5, -3.0] | 1 | N/A | N/A | N/A | N/A | N/A | 1 |
| < = -3.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.C. Conditional Exposure by Difficulty for Grade Eleven—ELA

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***b*-value** | **No. of Items** | **Frequency = 0** | **1 ≤ Frequency < 100** | **100 ≤ Frequency < 500** | **500 ≤ Frequency < 1000** | **1000 ≤ Frequency < 3000** | **Frequency ≥ 3000** |
| > 6.0 | 17 | 4 | N/A | 10 | 1 | N/A | 2 |
| (5.5, 6.0] | 14 | 2 | N/A | 7 | 1 | 2 | 2 |
| (5.0, 5.5] | 22 | 3 | 2 | 12 | 2 | 2 | 1 |
| (4.5, 5.0] | 42 | 3 | N/A | 31 | 1 | 2 | 5 |
| (4.0, 4.5] | 77 | N/A | 6 | 44 | 13 | 4 | 10 |
| (3.5, 4.0] | 116 | 3 | 2 | 26 | 12 | 57 | 16 |
| (3.0, 3.5] | 187 | 10 | 2 | 49 | 4 | 48 | 74 |
| (2.5, 3.0] | 261 | 24 | 4 | 65 | 24 | 56 | 88 |
| (2.0, 2.5] | 373 | 32 | 15 | 84 | 8 | 72 | 162 |
| (1.5, 2.0] | 431 | 19 | 2 | 83 | 18 | 55 | 254 |
| (1.0, 1.5] | 335 | 8 | 3 | 74 | 11 | 36 | 203 |
| (0.5, 1.0] | 322 | 9 | 6 | 86 | 12 | 33 | 176 |
| (0, 0.5] | 238 | 6 | 4 | 70 | 11 | 29 | 118 |
| (-0.5, 0] | 188 | 7 | 7 | 60 | 3 | 20 | 91 |
| (-1.0, -0.5] | 103 | 12 | 4 | 35 | 1 | 16 | 35 |
| (-1.5, -1.0] | 29 | 7 | 2 | 8 | N/A | 3 | 9 |
| (-2.0, -1.5] | 12 | 4 | N/A | 3 | 2 | 1 | 2 |
| (-2.5, -2.0] | 1 | N/A | N/A | N/A | N/A | N/A | 1 |
| (-3.0, -2.5] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (-3.5, -3.0] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| < = -3.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.C. Conditional Exposure by Difficulty for Grade Three—Mathematics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***b*-value** | **No. of Items** | **Frequency = 0** | **1 ≤ Frequency < 100** | **100 ≤ Frequency < 500** | **500 ≤ Frequency < 1000** | **1000 ≤ Frequency < 3000** | **Frequency ≥ 3000** |
| > 6.0 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (5.5, 6.0] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (5.0, 5.5] | 1 | N/A | N/A | 1 | N/A | N/A | N/A |
| (4.5, 5.0] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (4.0, 4.5] | 1 | N/A | N/A | 1 | N/A | N/A | N/A |
| (3.5, 4.0] | 1 | N/A | N/A | 1 | N/A | N/A | N/A |
| (3.0, 3.5] | 5 | N/A | N/A | 3 | 2 | N/A | N/A |
| (2.5, 3.0] | 3 | N/A | N/A | 2 | N/A | N/A | 1 |
| (2.0, 2.5] | 7 | N/A | N/A | 1 | 3 | 2 | 1 |
| (1.5, 2.0] | 14 | N/A | N/A | 5 | 3 | 2 | 4 |
| (1.0, 1.5] | 30 | N/A | N/A | 6 | 3 | 4 | 17 |
| (0.5, 1.0] | 91 | N/A | N/A | 21 | 9 | 13 | 48 |
| (0, 0.5] | 163 | N/A | N/A | 21 | 12 | 22 | 108 |
| (-0.5, 0] | 213 | N/A | N/A | 27 | 16 | 28 | 142 |
| (-1.0, -0.5] | 213 | N/A | N/A | 47 | 14 | 19 | 133 |
| (-1.5, -1.0] | 204 | N/A | N/A | 21 | 15 | 16 | 152 |
| (-2.0, -1.5] | 218 | 3 | 1 | 12 | 13 | 64 | 125 |
| (-2.5, -2.0] | 102 | N/A | N/A | 1 | 10 | 19 | 72 |
| (-3.0, -2.5] | 49 | N/A | N/A | N/A | 4 | 17 | 28 |
| (-3.5, -3.0] | 15 | N/A | N/A | 1 | 2 | 4 | 8 |
| < = -3.5 | 3 | N/A | N/A | 1 | N/A | N/A | 2 |

Table 8.C. Conditional Exposure by Difficulty for Grade Four—Mathematics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***b*-value** | **No. of Items** | **Frequency = 0** | **1 ≤ Frequency < 100** | **100 ≤ Frequency < 500** | **500 ≤ Frequency < 1000** | **1000 ≤ Frequency < 3000** | **Frequency ≥ 3000** |
| > 6.0 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (5.5, 6.0] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (5.0, 5.5] | 1 | N/A | N/A | N/A | 1 | N/A | N/A |
| (4.5, 5.0] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (4.0, 4.5] | 3 | N/A | N/A | 1 | N/A | 1 | 1 |
| (3.5, 4.0] | 2 | N/A | N/A | N/A | N/A | 1 | 1 |
| (3.0, 3.5] | 4 | N/A | N/A | N/A | N/A | 3 | 1 |
| (2.5, 3.0] | 8 | N/A | N/A | N/A | 1 | 2 | 5 |
| (2.0, 2.5] | 26 | N/A | N/A | N/A | 3 | 4 | 19 |
| (1.5, 2.0] | 49 | N/A | N/A | N/A | 2 | 10 | 37 |
| (1.0, 1.5] | 99 | N/A | N/A | N/A | N/A | 24 | 75 |
| (0.5, 1.0] | 201 | N/A | N/A | N/A | 2 | 35 | 164 |
| (0, 0.5] | 255 | N/A | N/A | 1 | 1 | 22 | 231 |
| (-0.5, 0] | 294 | N/A | N/A | 4 | 3 | 33 | 254 |
| (-1.0, -0.5] | 208 | N/A | N/A | 3 | 1 | 6 | 198 |
| (-1.5, -1.0] | 157 | N/A | N/A | 2 | 2 | 11 | 142 |
| (-2.0, -1.5] | 84 | N/A | 1 | N/A | N/A | 2 | 81 |
| (-2.5, -2.0] | 43 | 1 | N/A | N/A | N/A | 2 | 40 |
| (-3.0, -2.5] | 26 | 9 | N/A | N/A | N/A | 4 | 13 |
| (-3.5, -3.0] | 9 | 6 | N/A | N/A | N/A | 1 | 2 |
| < = -3.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.C. Conditional Exposure by Difficulty for Grade Five—Mathematics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***b*-value** | **No. of Items** | **Frequency = 0** | **1 ≤ Frequency < 100** | **100 ≤ Frequency < 500** | **500 ≤ Frequency < 1000** | **1000 ≤ Frequency < 3000** | **Frequency ≥ 3000** |
| > 6.0 | 1 | N/A | N/A | 1 | N/A | N/A | N/A |
| (5.5, 6.0] | 1 | N/A | N/A | 1 | N/A | N/A | N/A |
| (5.0, 5.5] | 2 | N/A | N/A | N/A | N/A | N/A | 2 |
| (4.5, 5.0] | 2 | N/A | N/A | N/A | N/A | 2 | N/A |
| (4.0, 4.5] | 3 | N/A | N/A | N/A | 1 | 1 | 1 |
| (3.5, 4.0] | 4 | N/A | N/A | N/A | N/A | 1 | 3 |
| (3.0, 3.5] | 8 | N/A | N/A | 1 | 2 | 3 | 2 |
| (2.5, 3.0] | 25 | N/A | N/A | N/A | 1 | 5 | 19 |
| (2.0, 2.5] | 65 | N/A | N/A | 1 | 2 | 11 | 51 |
| (1.5, 2.0] | 143 | 1 | N/A | 4 | 5 | 20 | 113 |
| (1.0, 1.5] | 186 | 2 | N/A | 2 | 9 | 26 | 147 |
| (0.5, 1.0] | 257 | 1 | N/A | 2 | 4 | 45 | 205 |
| (0, 0.5] | 298 | N/A | 1 | 4 | 5 | 45 | 243 |
| (-0.5, 0] | 187 | N/A | N/A | N/A | N/A | 14 | 173 |
| (-1.0, -0.5] | 114 | N/A | N/A | 1 | 1 | 10 | 102 |
| (-1.5, -1.0] | 47 | N/A | N/A | N/A | N/A | 1 | 46 |
| (-2.0, -1.5] | 32 | 2 | 2 | N/A | 2 | 2 | 24 |
| (-2.5, -2.0] | 30 | 2 | 5 | 1 | N/A | N/A | 22 |
| (-3.0, -2.5] | 20 | 7 | 3 | N/A | N/A | 2 | 8 |
| (-3.5, -3.0] | 6 | 4 | N/A | N/A | N/A | 2 | N/A |
| < = -3.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.C. Conditional Exposure by Difficulty for Grade Six—Mathematics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***b*-*v*alue** | **No. of Items** | **Frequency = 0** | **1 ≤ Frequency < 100** | **100 ≤ Frequency < 500** | **500 ≤ Frequency < 1000** | **1000 ≤ Frequency < 3000** | **Frequency ≥ 3000** |
| > 6.0 | 8 | N/A | N/A | N/A | 6 | 1 | 1 |
| (5.5, 6.0] | 4 | N/A | N/A | N/A | 3 | 1 | N/A |
| (5.0, 5.5] | 6 | N/A | N/A | N/A | 3 | 3 | N/A |
| (4.5, 5.0] | 5 | N/A | N/A | N/A | 3 | 2 | N/A |
| (4.0, 4.5] | 9 | N/A | N/A | N/A | 4 | 3 | 2 |
| (3.5, 4.0] | 18 | N/A | N/A | N/A | N/A | 12 | 6 |
| (3.0, 3.5] | 34 | N/A | N/A | N/A | 2 | 7 | 25 |
| (2.5, 3.0] | 59 | N/A | N/A | N/A | 5 | 13 | 41 |
| (2.0, 2.5] | 135 | N/A | N/A | N/A | 1 | 35 | 99 |
| (1.5, 2.0] | 187 | N/A | N/A | N/A | 2 | 50 | 135 |
| (1.0, 1.5] | 207 | N/A | N/A | N/A | 4 | 47 | 156 |
| (0.5, 1.0] | 194 | N/A | N/A | N/A | 1 | 39 | 154 |
| (0, 0.5] | 133 | N/A | N/A | N/A | 5 | 10 | 118 |
| (-0.5, 0] | 90 | N/A | N/A | N/A | 4 | 11 | 75 |
| (-1.0, -0.5] | 78 | N/A | N/A | N/A | N/A | 11 | 67 |
| (-1.5, -1.0] | 33 | N/A | N/A | N/A | N/A | 1 | 32 |
| (-2.0, -1.5] | 33 | N/A | N/A | N/A | 3 | 2 | 28 |
| (-2.5, -2.0] | 17 | N/A | N/A | N/A | 1 | N/A | 16 |
| (-3.0, -2.5] | 7 | N/A | N/A | N/A | 2 | N/A | 5 |
| (-3.5, -3.0] | 1 | N/A | N/A | N/A | N/A | N/A | 1 |
| < = -3.5 | 1 | N/A | N/A | N/A | N/A | N/A | 1 |

Table 8.C. Conditional Exposure by Difficulty for Grade Seven—Mathematics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***b*-value** | **No. of Items** | **Frequency = 0** | **1 ≤ Frequency < 100** | **100 ≤ Frequency < 500** | **500 ≤ Frequency < 1000** | **1000 ≤ Frequency < 3000** | **Frequency ≥ 3000** |
| > 6.0 | 6 | N/A | N/A | N/A | 5 | N/A | 1 |
| (5.5, 6.0] | 5 | N/A | N/A | N/A | 3 | 2 | N/A |
| (5.0, 5.5] | 12 | N/A | N/A | N/A | 7 | 4 | 1 |
| (4.5, 5.0] | 10 | N/A | N/A | N/A | 1 | 5 | 4 |
| (4.0, 4.5] | 17 | N/A | N/A | N/A | 2 | 2 | 13 |
| (3.5, 4.0] | 34 | N/A | N/A | N/A | 4 | 11 | 19 |
| (3.0, 3.5] | 65 | N/A | N/A | N/A | 10 | 19 | 36 |
| (2.5, 3.0] | 151 | N/A | N/A | N/A | 25 | 43 | 83 |
| (2.0, 2.5] | 191 | N/A | N/A | N/A | 15 | 62 | 114 |
| (1.5, 2.0] | 210 | N/A | N/A | N/A | 1 | 53 | 156 |
| (1.0, 1.5] | 193 | N/A | N/A | N/A | 5 | 37 | 151 |
| (0.5, 1.0] | 104 | N/A | N/A | N/A | 6 | 4 | 94 |
| (0, 0.5] | 66 | N/A | N/A | N/A | N/A | 2 | 64 |
| (-0.5, 0] | 34 | N/A | N/A | N/A | N/A | N/A | 34 |
| (-1.0, -0.5] | 26 | N/A | N/A | N/A | N/A | N/A | 26 |
| (-1.5, -1.0] | 13 | N/A | N/A | N/A | N/A | N/A | 13 |
| (-2.0, -1.5] | 11 | N/A | N/A | N/A | N/A | N/A | 11 |
| (-2.5, -2.0] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (-3.0, -2.5] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (-3.5, -3.0] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| < = -3.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.C. Conditional Exposure by Difficulty for Grade Eight—Mathematics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***b*-value** | **No. of Items** | **Frequency = 0** | **1 ≤ Frequency < 100** | **100 ≤ Frequency < 500** | **500 ≤ Frequency < 1000** | **1000 ≤ Frequency < 3000** | **Frequency ≥ 3000** |
| > 6.0 | 19 | N/A | N/A | N/A | 16 | 3 | N/A |
| (5.5, 6.0] | 15 | N/A | N/A | N/A | 11 | 4 | N/A |
| (5.0, 5.5] | 22 | N/A | N/A | N/A | 19 | 3 | N/A |
| (4.5, 5.0] | 22 | N/A | N/A | 1 | 12 | 6 | 3 |
| (4.0, 4.5] | 40 | N/A | N/A | N/A | 14 | 10 | 16 |
| (3.5, 4.0] | 71 | N/A | N/A | N/A | 6 | 24 | 41 |
| (3.0, 3.5] | 104 | N/A | N/A | N/A | 4 | 33 | 67 |
| (2.5, 3.0] | 123 | N/A | N/A | N/A | 12 | 23 | 88 |
| (2.0, 2.5] | 147 | N/A | N/A | N/A | 11 | 22 | 114 |
| (1.5, 2.0] | 128 | N/A | N/A | N/A | 5 | 16 | 107 |
| (1.0, 1.5] | 97 | N/A | N/A | N/A | 8 | 3 | 86 |
| (0.5, 1.0] | 54 | N/A | N/A | N/A | N/A | 3 | 51 |
| (0, 0.5] | 59 | N/A | N/A | N/A | 2 | 1 | 56 |
| (-0.5, 0] | 39 | N/A | N/A | N/A | N/A | N/A | 39 |
| (-1.0, -0.5] | 37 | N/A | N/A | N/A | N/A | N/A | 37 |
| (-1.5, -1.0] | 18 | N/A | N/A | N/A | N/A | 1 | 17 |
| (-2.0, -1.5] | 12 | 1 | N/A | N/A | N/A | N/A | 11 |
| (-2.5, -2.0] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (-3.0, -2.5] | 1 | N/A | N/A | N/A | N/A | N/A | 1 |
| (-3.5, -3.0] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| < = -3.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Table 8.C. Conditional Exposure by Difficulty for Grade Eleven—Mathematics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***b*-value** | **No. of Items** | **Frequency = 0** | **1 ≤ Frequency < 100** | **100 ≤ Frequency < 500** | **500 ≤ Frequency < 1000** | **1000 ≤ Frequency < 3000** | **Frequency ≥ 3000** |
| > 6.0 | 39 | N/A | N/A | 32 | 4 | 1 | 2 |
| (5.5, 6.0] | 36 | N/A | N/A | 28 | 2 | 3 | 3 |
| (5.0, 5.5] | 54 | N/A | N/A | 43 | 8 | N/A | 3 |
| (4.5, 5.0] | 112 | N/A | N/A | 77 | 23 | 10 | 2 |
| (4.0, 4.5] | 157 | N/A | N/A | 85 | 21 | 34 | 17 |
| (3.5, 4.0] | 277 | N/A | N/A | 39 | 58 | 107 | 73 |
| (3.0, 3.5] | 363 | N/A | N/A | 50 | 84 | 135 | 94 |
| (2.5, 3.0] | 401 | N/A | N/A | 46 | 87 | 159 | 109 |
| (2.0, 2.5] | 360 | N/A | N/A | 20 | 74 | 140 | 126 |
| (1.5, 2.0] | 292 | N/A | N/A | 21 | 53 | 85 | 133 |
| (1.0, 1.5] | 212 | N/A | N/A | 4 | 4 | 53 | 151 |
| (0.5, 1.0] | 146 | 1 | N/A | 1 | 3 | 38 | 103 |
| (0, 0.5] | 102 | N/A | N/A | N/A | 3 | 22 | 77 |
| (-0.5, 0] | 50 | N/A | N/A | N/A | N/A | 5 | 45 |
| (-1.0, -0.5] | 36 | N/A | N/A | N/A | N/A | 3 | 33 |
| (-1.5, -1.0] | 23 | N/A | N/A | N/A | 2 | 3 | 18 |
| (-2.0, -1.5] | 9 | N/A | N/A | N/A | N/A | 4 | 5 |
| (-2.5, -2.0] | 7 | N/A | N/A | N/A | 2 | 3 | 2 |
| (-3.0, -2.5] | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| (-3.5, -3.0] | 3 | N/A | N/A | 3 | N/A | N/A | N/A |
| < = -3.5 | 1 | N/A | N/A | N/A | N/A | 1 | N/A |

### Appendix 8.D: Reliability Analyses

Table 8.D. Reliabilities of Claims and Intercorrelations for Grade Three—ELA

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Claim | No. of Items | FT No. of Items | 1 | 2 | 3 | 4 | Reliability | SEM |
| Claim 1 | 14–16 | 14–16 | 1.00 | N/A | N/A | N/A | 0.74 | 0.55 |
| Claim 2 | 8 | 9 | 0.67 | 1.00 | N/A | N/A | 0.70 | 0.64 |
| Claim 3 | 8–9 | 8–9 | 0.65 | 0.60 | 1.00 | N/A | 0.51 | 0.82 |
| Claim 4 | 9 | 9 | 0.69 | 0.67 | 0.61 | 1.00 | 0.70 | 0.67 |

Table 8.D. Reliabilities of Claims and Intercorrelations for Grade Four—ELA

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Claim | No. of Items | FT No. of Items | 1 | 2 | 3 | 4 | Reliability | SEM |
| Claim 1 | 14–16 | 14–16 | 1.00 | N/A | N/A | N/A | 0.75 | 0.58 |
| Claim 2 | 8 | 9 | 0.67 | 1.00 | N/A | N/A | 0.69 | 0.69 |
| Claim 3 | 8–9 | 8–9 | 0.65 | 0.59 | 1.00 | N/A | 0.51 | 0.90 |
| Claim 4 | 9 | 9 | 0.71 | 0.66 | 0.63 | 1.00 | 0.69 | 0.72 |

Table 8.D. Reliabilities of Claims and Intercorrelations for Grade Five—ELA

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Claim | No. of Items | FT No. of Items | 1 | 2 | 3 | 4 | Reliability | SEM |
| Claim 1 | 14–16 | 14–16 | 1.00 | N/A | N/A | N/A | 0.74 | 0.58 |
| Claim 2 | 8 | 9 | 0.68 | 1.00 | N/A | N/A | 0.71 | 0.69 |
| Claim 3 | 8–9 | 8–9 | 0.66 | 0.60 | 1.00 | N/A | 0.52 | 0.88 |
| Claim 4 | 9 | 9 | 0.74 | 0.69 | 0.66 | 1.00 | 0.74 | 0.63 |

Table 8.D. Reliabilities of Claims and Intercorrelations for Grade Six—ELA

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Claim | No. of Items | FT No. of Items | 1 | 2 | 3 | 4 | Reliability | SEM |
| Claim 1 | 14–17 | 14–17 | 1.00 | N/A | N/A | N/A | 0.75 | 0.62 |
| Claim 2 | 8 | 9 | 0.69 | 1.00 | N/A | N/A | 0.72 | 0.63 |
| Claim 3 | 8–9 | 8–9 | 0.67 | 0.64 | 1.00 | N/A | 0.50 | 0.90 |
| Claim 4 | 9 | 9 | 0.71 | 0.68 | 0.64 | 1.00 | 0.69 | 0.73 |

Table 8.D. Reliabilities of Claims and Intercorrelations for Grade Seven—ELA

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Claim | No. of Items | FT No. of Items | 1 | 2 | 3 | 4 | Reliability | SEM |
| Claim 1 | 14–17 | 14–17 | 1.00 | N/A | N/A | N/A | 0.75 | 0.61 |
| Claim 2 | 8 | 9 | 0.70 | 1.00 | N/A | N/A | 0.70 | 0.68 |
| Claim 3 | 8–9 | 8–9 | 0.66 | 0.61 | 1.00 | N/A | 0.45 | 0.95 |
| Claim 4 | 9 | 9 | 0.73 | 0.70 | 0.63 | 1.00 | 0.69 | 0.75 |

Table 8.D. Reliabilities of Claims and Intercorrelations for Grade Eight—ELA

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Claim | No. of Items | FT No. of Items | 1 | 2 | 3 | 4 | Reliability | SEM |
| Claim 1 | 14–17 | 14–17 | 1.00 | N/A | N/A | N/A | 0.74 | 0.64 |
| Claim 2 | 8 | 9 | 0.70 | 1.00 | N/A | N/A | 0.69 | 0.69 |
| Claim 3 | 8–9 | 8–9 | 0.68 | 0.64 | 1.00 | N/A | 0.48 | 0.90 |
| Claim 4 | 9 | 9 | 0.73 | 0.70 | 0.65 | 1.00 | 0.69 | 0.73 |

Table 8.D. Reliabilities of Claims and Intercorrelations for Grade Eleven—ELA

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Claim | No. of Items | FT No. of Items | 1 | 2 | 3 | 4 | Reliability | SEM |
| Claim 1 | 15–16 | 15–16 | 1.00 | N/A | N/A | N/A | 0.75 | 0.66 |
| Claim 2 | 8 | 9 | 0.73 | 1.00 | N/A | N/A | 0.69 | 0.76 |
| Claim 3 | 8–9 | 8–9 | 0.70 | 0.65 | 1.00 | N/A | 0.44 | 1.02 |
| Claim 4 | 9 | 9 | 0.74 | 0.74 | 0.65 | 1.00 | 0.66 | 0.82 |

Table 8.D Reliabilities of Claims and Intercorrelations for Grade Three—Mathematics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Claim | No. of Items | FT No. of Items | 1 | 2 | 3 | Reliability | SEM |
| Claim 1 | 17–20 | 17–20 | 1.00 | N/A | N/A | 0.90 | 0.34 |
| Claim 2 | 8–10 | 8 | 0.78 | 1.00 | N/A | 0.72 | 0.54 |
| Claim 3 | 8–10 | 8 | 0.79 | 0.74 | 1.00 | 0.74 | 0.56 |

Table 8.D. Reliabilities of Claims and Intercorrelations for Grade Four—Mathematics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Claim | No. of Items | FT No. of Items | 1 | 2 | 3 | Reliability | SEM |
| Claim 1 | 17–20 | 17–20 | 1.00 | N/A | N/A | 0.90 | 0.34 |
| Claim 2 | 8–10 | 8 | 0.81 | 1.00 | N/A | 0.74 | 0.54 |
| Claim 3 | 8–10 | 8 | 0.81 | 0.75 | 1.00 | 0.73 | 0.58 |

Table 8.D. Reliabilities of Claims and Intercorrelations for Grade Five—Mathematics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Claim | No. of Items | FT No. of Items | 1 | 2 | 3 | Reliability | SEM |
| Claim 1 | 17–20 | 17–20 | 1.00 | N/A | N/A | 0.89 | 0.40 |
| Claim 2 | 8–10 | 8 | 0.77 | 1.00 | N/A | 0.69 | 0.60 |
| Claim 3 | 8–10 | 8 | 0.79 | 0.71 | 1.00 | 0.68 | 0.70 |

Table 8.D. Reliabilities of Claims and Intercorrelations for Grade Six—Mathematics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Claim | No. of Items | FT No. of Items | 1 | 2 | 3 | Reliability | SEM |
| Claim 1 | 16–20 | 16–20 | 1.00 | N/A | N/A | 0.89 | 0.45 |
| Claim 2 | 8–10 | 8 | 0.83 | 1.00 | N/A | 0.72 | 0.66 |
| Claim 3 | 8–10 | 8 | 0.81 | 0.76 | 1.00 | 0.71 | 0.72 |

Table 8.D. Reliabilities of Claims and Intercorrelations for Grade Seven—Mathematics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Claim | No. of Items | FT No. of Items | 1 | 2 | 3 | Reliability | SEM |
| Claim 1 | 16–20 | 16–20 | 1.00 | N/A | N/A | 0.89 | 0.47 |
| Claim 2 | 8–10 | 8 | 0.81 | 1.00 | N/A | 0.68 | 0.78 |
| Claim 3 | 8–10 | 8 | 0.78 | 0.72 | 1.00 | 0.62 | 0.90 |

Table 8.D. Reliabilities of Claims and Intercorrelations for Grade Eight—Mathematics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Claim | No. of Items | FT No. of Items | 1 | 2 | 3 | Reliability | SEM |
| Claim 1 | 16–20 | 16–20 | 1.00 | N/A | N/A | 0.88 | 0.53 |
| Claim 2 | 8–10 | 8 | 0.81 | 1.00 | N/A | 0.73 | 0.78 |
| Claim 3 | 8–10 | 8 | 0.81 | 0.74 | 1.00 | 0.65 | 0.90 |

Table 8.D. Reliabilities of Claims and Intercorrelations for Grade Eleven—Mathematics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Claim | No. of Items | FT No. of Items | 1 | 2 | 3 | Reliability | SEM |
| Claim 1 | 19–22 | 19–22 | 1.00 | N/A | N/A | 0.89 | 0.53 |
| Claim 2 | 8–10 | 8 | 0.79 | 1.00 | N/A | 0.56 | 1.05 |
| Claim 3 | 8–10 | 8 | 0.77 | 0.69 | 1.00 | 0.55 | 1.09 |

Table 8.D. Reliabilities and SEMs by Gender

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Content Area and Grade** | **Male N** | **Male Reliability** | **Male SEM** | **Female N** | **Female Reliability** | **Female SEM** |
| ELA 3 | 223,052 | 0.92 | 0.30 | 214,031 | 0.92 | 0.30 |
| ELA 4 | 219,538 | 0.92 | 0.32 | 207,335 | 0.91 | 0.32 |
| ELA 5 | 229,193 | 0.93 | 0.32 | 215,668 | 0.92 | 0.31 |
| ELA 6 | 231,332 | 0.92 | 0.33 | 218,562 | 0.91 | 0.32 |
| ELA 7 | 236,119 | 0.92 | 0.34 | 224,089 | 0.91 | 0.33 |
| ELA 8 | 231,216 | 0.92 | 0.34 | 220,324 | 0.91 | 0.33 |
| ELA 11 | 214,159 | 0.92 | 0.38 | 206,197 | 0.91 | 0.37 |
| Mathematics 3 | 222,198 | 0.95 | 0.24 | 215,562 | 0.94 | 0.24 |
| Mathematics 4 | 218,475 | 0.95 | 0.25 | 210,125 | 0.94 | 0.25 |
| Mathematics 5 | 229,270 | 0.94 | 0.30 | 218,534 | 0.93 | 0.29 |
| Mathematics 6 | 227,676 | 0.94 | 0.33 | 219,234 | 0.94 | 0.32 |
| Mathematics 7 | 235,255 | 0.94 | 0.36 | 226,980 | 0.94 | 0.35 |
| Mathematics 8 | 226,133 | 0.94 | 0.39 | 219,735 | 0.93 | 0.38 |
| Mathematics 11 | 214,905 | 0.93 | 0.44 | 211,726 | 0.92 | 0.42 |

Table 8.D. Reliabilities and SEMs by Economic Status

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Content Area and Grade** | **No Economic Disadvantage N** | **No Economic Disadvantage Reliability** | **No Economic Disadvantage SEM** | **Economic Disadvantage N** | **Economic Disadvantage Reliability** | **Economic Disadvantage SEM** |
| ELA 3 | 163,184 | 0.91 | 0.29 | 273,899 | 0.91 | 0.31 |
| ELA 4 | 158,269 | 0.90 | 0.32 | 268,604 | 0.91 | 0.32 |
| ELA 5 | 164,548 | 0.91 | 0.32 | 280,313 | 0.92 | 0.31 |
| ELA 6 | 168,830 | 0.90 | 0.32 | 281,064 | 0.91 | 0.32 |
| ELA 7 | 175,270 | 0.90 | 0.34 | 284,938 | 0.91 | 0.34 |
| ELA 8 | 175,645 | 0.91 | 0.33 | 275,895 | 0.91 | 0.34 |
| ELA 11 | 173,503 | 0.91 | 0.37 | 246,853 | 0.91 | 0.38 |
| Mathematics 3 | 163,302 | 0.94 | 0.23 | 274,458 | 0.94 | 0.25 |
| Mathematics 4 | 159,082 | 0.94 | 0.24 | 269,518 | 0.93 | 0.26 |
| Mathematics 5 | 166,141 | 0.94 | 0.27 | 281,663 | 0.92 | 0.31 |
| Mathematics 6 | 168,322 | 0.94 | 0.29 | 278,588 | 0.92 | 0.34 |
| Mathematics 7 | 177,521 | 0.94 | 0.32 | 284,714 | 0.92 | 0.38 |
| Mathematics 8 | 172,283 | 0.94 | 0.35 | 273,585 | 0.92 | 0.40 |
| Mathematics 11 | 180,119 | 0.94 | 0.39 | 246,512 | 0.90 | 0.46 |

Table 8.D. Reliabilities and SEMs by Special Education Services Status

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Content Area and Grade** | **No Special Education Services N** | **No Special Education Services Reliability** | **No Special Education Services SEM** | **With Special Education Services N** | **With Special Education Services Reliability** | **With Special Education Services SEM** |
| ELA 3 | 386,177 | 0.91 | 0.30 | 50,906 | 0.90 | 0.33 |
| ELA 4 | 373,587 | 0.91 | 0.32 | 53,286 | 0.90 | 0.34 |
| ELA 5 | 388,145 | 0.91 | 0.31 | 56,716 | 0.91 | 0.33 |
| ELA 6 | 394,940 | 0.91 | 0.32 | 54,954 | 0.89 | 0.35 |
| ELA 7 | 405,910 | 0.91 | 0.33 | 54,298 | 0.89 | 0.36 |
| ELA 8 | 399,994 | 0.91 | 0.33 | 51,546 | 0.87 | 0.37 |
| ELA 11 | 379,985 | 0.91 | 0.37 | 40,371 | 0.87 | 0.41 |
| Mathematics 3 | 387,612 | 0.94 | 0.24 | 50,148 | 0.94 | 0.28 |
| Mathematics 4 | 376,101 | 0.94 | 0.24 | 52,499 | 0.93 | 0.29 |
| Mathematics 5 | 391,582 | 0.93 | 0.28 | 56,222 | 0.90 | 0.36 |
| Mathematics 6 | 395,053 | 0.94 | 0.31 | 51,857 | 0.89 | 0.42 |
| Mathematics 7 | 409,447 | 0.94 | 0.34 | 52,788 | 0.87 | 0.45 |
| Mathematics 8 | 396,018 | 0.93 | 0.37 | 49,850 | 0.86 | 0.46 |
| Mathematics 11 | 387,778 | 0.93 | 0.42 | 38,853 | 0.78 | 0.56 |

**Notes:**

* “No Accommodations” indicates students who had an individualized education program (IEP) or Section 504 plan but were not assigned any accommodations in the test.
* “Accommodations” indicates students who had an IEP or Section 504 plan and were assigned accommodations.
* Refer to section *2.5 Universal Tools, Designated Supports, and Accommodations* in *Chapter 2: Overview of California Assessment of Student Performance and Progress (CAASPP) Smarter Balanced Processes* for accommodation conditions.

Table 8.D. Reliabilities and SEMs by Accommodations

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Content Area and Grade** | **No Accommodations N** | **No Accommodations Reliability** | **No Accommodations SEM** | **Accommodations N** | **Accommodations Reliability** | **Accommodations SEM** |
| ELA 3 | 32,633 | 0.92 | 0.32 | 22,710 | 0.83 | 0.34 |
| ELA 4 | 31,637 | 0.92 | 0.33 | 27,188 | 0.85 | 0.35 |
| ELA 5 | 33,224 | 0.93 | 0.32 | 30,217 | 0.86 | 0.33 |
| ELA 6 | 33,704 | 0.92 | 0.34 | 29,146 | 0.84 | 0.36 |
| ELA 7 | 35,582 | 0.92 | 0.35 | 27,459 | 0.84 | 0.37 |
| ELA 8 | 36,774 | 0.91 | 0.35 | 24,408 | 0.81 | 0.38 |
| ELA 11 | 42,776 | 0.91 | 0.40 | 8,813 | 0.83 | 0.42 |
| Mathematics 3 | 49,765 | 0.94 | 0.27 | 4,831 | 0.91 | 0.29 |
| Mathematics 4 | 36,789 | 0.94 | 0.27 | 21,238 | 0.88 | 0.31 |
| Mathematics 5 | 34,283 | 0.93 | 0.32 | 28,678 | 0.82 | 0.38 |
| Mathematics 6 | 31,762 | 0.93 | 0.37 | 27,958 | 0.82 | 0.44 |
| Mathematics 7 | 33,808 | 0.92 | 0.40 | 27,745 | 0.78 | 0.47 |
| Mathematics 8 | 34,148 | 0.92 | 0.43 | 25,238 | 0.76 | 0.48 |
| Mathematics 11 | 40,565 | 0.88 | 0.52 | 9,630 | 0.64 | 0.59 |

Table 8.D. Reliabilities and SEMs by English Language Fluency

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Content Area and Grade** | **English Only N** | **English Only Reliability** | **English Only SEM** | **Initially Designated Fluent N** | **Initially Designated Fluent Reliability** | **Initially Designated Fluent SEM** |
| ELA 3 | 263,817 | 0.92 | 0.30 | 15,458 | 0.89 | 0.29 |
| ELA 4 | 251,170 | 0.92 | 0.32 | 15,846 | 0.88 | 0.32 |
| ELA 5 | 257,225 | 0.92 | 0.32 | 16,658 | 0.89 | 0.32 |
| ELA 6 | 255,900 | 0.92 | 0.32 | 17,018 | 0.89 | 0.32 |
| ELA 7 | 255,548 | 0.92 | 0.34 | 18,532 | 0.89 | 0.34 |
| ELA 8 | 246,830 | 0.92 | 0.34 | 18,691 | 0.90 | 0.33 |
| ELA 11 | 220,808 | 0.92 | 0.37 | 20,720 | 0.90 | 0.37 |
| Mathematics 3 | 263,129 | 0.95 | 0.24 | 15,253 | 0.93 | 0.23 |
| Mathematics 4 | 251,333 | 0.95 | 0.24 | 15,695 | 0.94 | 0.23 |
| Mathematics 5 | 258,364 | 0.94 | 0.29 | 16,678 | 0.94 | 0.26 |
| Mathematics 6 | 254,014 | 0.94 | 0.32 | 16,640 | 0.94 | 0.29 |
| Mathematics 7 | 256,780 | 0.94 | 0.34 | 18,601 | 0.95 | 0.31 |
| Mathematics 8 | 243,570 | 0.94 | 0.37 | 17,792 | 0.94 | 0.34 |
| Mathematics 11 | 225,480 | 0.93 | 0.42 | 21,590 | 0.94 | 0.37 |

Table 8.D.19 Reliabilities and SEMs by English Language Fluency (Continued)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Content Area and Grade** | **English Learner N** | **English Learner Reliability** | **English Learner SEM** | **Reclassified Fluent N** | **Reclassified Fluent Reliability** | **Reclassified Fluent SEM** |
| ELA 3 | 95,441 | 0.87 | 0.32 | 61,972 | 0.88 | 0.29 |
| ELA 4 | 97,105 | 0.87 | 0.33 | 62,415 | 0.86 | 0.31 |
| ELA 5 | 85,538 | 0.87 | 0.32 | 85,142 | 0.87 | 0.31 |
| ELA 6 | 72,272 | 0.85 | 0.34 | 104,377 | 0.88 | 0.31 |
| ELA 7 | 65,857 | 0.85 | 0.35 | 119,928 | 0.89 | 0.33 |
| ELA 8 | 54,639 | 0.80 | 0.36 | 131,125 | 0.89 | 0.33 |
| ELA 11 | 37,883 | 0.80 | 0.42 | 140,666 | 0.90 | 0.37 |
| Mathematics 3 | 97,321 | 0.92 | 0.26 | 61,558 | 0.93 | 0.23 |
| Mathematics 4 | 98,962 | 0.91 | 0.27 | 62,174 | 0.93 | 0.23 |
| Mathematics 5 | 87,320 | 0.87 | 0.34 | 85,043 | 0.92 | 0.27 |
| Mathematics 6 | 72,189 | 0.87 | 0.39 | 103,648 | 0.93 | 0.30 |
| Mathematics 7 | 66,675 | 0.84 | 0.44 | 119,755 | 0.93 | 0.33 |
| Mathematics 8 | 55,141 | 0.83 | 0.46 | 129,020 | 0.93 | 0.37 |
| Mathematics 11 | 37,467 | 0.76 | 0.57 | 141,785 | 0.92 | 0.42 |

Table 8.D. Reliabilities and SEMs by Primary Ethnicity

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Content Area and Grade** | **American Indian or Alaska Native N** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian N** | **Asian Reliability** | **Asian SEM** |
| ELA 3 | 2,093 | 0.91 | 0.31 | 38,989 | 0.91 | 0.30 |
| ELA 4 | 2,007 | 0.91 | 0.32 | 37,001 | 0.90 | 0.32 |
| ELA 5 | 2,162 | 0.92 | 0.32 | 38,932 | 0.91 | 0.33 |
| ELA 6 | 2,323 | 0.91 | 0.33 | 39,489 | 0.90 | 0.32 |
| ELA 7 | 2,358 | 0.92 | 0.34 | 39,639 | 0.90 | 0.34 |
| ELA 8 | 2,364 | 0.91 | 0.34 | 40,270 | 0.90 | 0.34 |
| ELA 11 | 2,191 | 0.91 | 0.38 | 36,907 | 0.91 | 0.37 |
| Mathematics 3 | 2,080 | 0.94 | 0.25 | 38,704 | 0.94 | 0.23 |
| Mathematics 4 | 2,003 | 0.93 | 0.26 | 36,813 | 0.94 | 0.23 |
| Mathematics 5 | 2,165 | 0.92 | 0.31 | 38,935 | 0.94 | 0.26 |
| Mathematics 6 | 2,280 | 0.93 | 0.35 | 38,527 | 0.94 | 0.28 |
| Mathematics 7 | 2,343 | 0.92 | 0.38 | 39,621 | 0.95 | 0.30 |
| Mathematics 8 | 2,335 | 0.92 | 0.41 | 37,372 | 0.95 | 0.32 |
| Mathematics 11 | 2,162 | 0.90 | 0.46 | 38,931 | 0.95 | 0.34 |

Table 8.D.20 Reliabilities and SEMs by Primary Ethnicity (Continued One)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Content Area and Grade** | **Native Hawaiian or Other Pacific Islander N** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino N** | **Filipino Reliability** | **Filipino SEM** |
| ELA 3 | 1,875 | 0.91 | 0.30 | 8,382 | 0.91 | 0.29 |
| ELA 4 | 1,896 | 0.91 | 0.32 | 8,225 | 0.90 | 0.32 |
| ELA 5 | 2,058 | 0.92 | 0.31 | 8,842 | 0.90 | 0.32 |
| ELA 6 | 2,134 | 0.91 | 0.32 | 9,040 | 0.89 | 0.32 |
| ELA 7 | 2,088 | 0.91 | 0.33 | 10,082 | 0.89 | 0.33 |
| ELA 8 | 2,162 | 0.91 | 0.34 | 10,548 | 0.89 | 0.33 |
| ELA 11 | 2,087 | 0.91 | 0.38 | 11,794 | 0.89 | 0.36 |
| Mathematics 3 | 1,869 | 0.94 | 0.24 | 8,435 | 0.94 | 0.23 |
| Mathematics 4 | 1,898 | 0.93 | 0.25 | 8,348 | 0.94 | 0.23 |
| Mathematics 5 | 2,069 | 0.93 | 0.30 | 9,020 | 0.93 | 0.27 |
| Mathematics 6 | 2,094 | 0.93 | 0.33 | 9,104 | 0.94 | 0.29 |
| Mathematics 7 | 2,103 | 0.93 | 0.36 | 10,342 | 0.94 | 0.31 |
| Mathematics 8 | 2,151 | 0.92 | 0.39 | 10,529 | 0.94 | 0.34 |
| Mathematics 11 | 2,061 | 0.91 | 0.44 | 12,248 | 0.93 | 0.37 |

Table 8.D.20 Reliabilities and SEMs by Primary Ethnicity (Continued Two)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Content Area and Grade** | **Hispanic or Latino N** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American N** | **Black or African American Reliability** | **Black or African American SEM** | **White N** | **White Reliability** | **White SEM** |
| ELA 3 | 242,496 | 0.91 | 0.30 | 23,286 | 0.91 | 0.31 | 97,198 | 0.91 | 0.30 |
| ELA 4 | 238,748 | 0.91 | 0.32 | 22,916 | 0.91 | 0.33 | 94,462 | 0.91 | 0.32 |
| ELA 5 | 250,549 | 0.92 | 0.31 | 24,175 | 0.92 | 0.32 | 97,386 | 0.91 | 0.32 |
| ELA 6 | 252,332 | 0.91 | 0.32 | 24,117 | 0.91 | 0.33 | 100,118 | 0.91 | 0.32 |
| ELA 7 | 259,381 | 0.91 | 0.34 | 24,576 | 0.91 | 0.34 | 102,169 | 0.91 | 0.33 |
| ELA 8 | 251,197 | 0.91 | 0.34 | 24,101 | 0.91 | 0.35 | 102,305 | 0.91 | 0.33 |
| ELA 11 | 232,154 | 0.91 | 0.38 | 22,805 | 0.91 | 0.39 | 96,043 | 0.91 | 0.37 |
| Mathematics 3 | 243,419 | 0.94 | 0.25 | 23,169 | 0.93 | 0.26 | 97,359 | 0.94 | 0.23 |
| Mathematics 4 | 240,041 | 0.93 | 0.25 | 22,814 | 0.93 | 0.27 | 95,025 | 0.94 | 0.24 |
| Mathematics 5 | 252,099 | 0.92 | 0.31 | 24,095 | 0.91 | 0.33 | 98,459 | 0.94 | 0.27 |
| Mathematics 6 | 250,821 | 0.92 | 0.34 | 23,563 | 0.92 | 0.37 | 100,269 | 0.94 | 0.30 |
| Mathematics 7 | 259,829 | 0.92 | 0.37 | 24,266 | 0.91 | 0.39 | 103,513 | 0.94 | 0.32 |
| Mathematics 8 | 249,881 | 0.92 | 0.40 | 23,632 | 0.90 | 0.42 | 101,567 | 0.94 | 0.35 |
| Mathematics 11 | 232,253 | 0.90 | 0.46 | 22,505 | 0.88 | 0.49 | 99,532 | 0.94 | 0.39 |

Table 8.D. Reliabilities and SEMs by Migrant Status

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Content Area and Grade** | **Migrant N** | **Migrant Reliability** | **Migrant SEM** | **Non-Migrant N** | **Non-Migrant Reliability** | **Non-Migrant SEM** |
| ELA 3 | 3,751 | 0.89 | 0.31 | 433,332 | 0.92 | 0.30 |
| ELA 4 | 3,729 | 0.90 | 0.33 | 423,144 | 0.92 | 0.32 |
| ELA 5 | 3,773 | 0.91 | 0.32 | 441,088 | 0.92 | 0.32 |
| ELA 6 | 3,578 | 0.91 | 0.33 | 446,316 | 0.92 | 0.32 |
| ELA 7 | 3,604 | 0.91 | 0.34 | 456,604 | 0.92 | 0.34 |
| ELA 8 | 3,708 | 0.90 | 0.35 | 447,832 | 0.92 | 0.34 |
| ELA 11 | 3,028 | 0.91 | 0.38 | 417,328 | 0.92 | 0.38 |
| Mathematics 3 | 3,801 | 0.93 | 0.25 | 433,959 | 0.95 | 0.24 |
| Mathematics 4 | 3,772 | 0.92 | 0.26 | 424,828 | 0.94 | 0.25 |
| Mathematics 5 | 3,845 | 0.91 | 0.32 | 443,959 | 0.94 | 0.29 |
| Mathematics 6 | 3,591 | 0.91 | 0.36 | 443,319 | 0.94 | 0.33 |
| Mathematics 7 | 3,657 | 0.90 | 0.40 | 458,578 | 0.94 | 0.35 |
| Mathematics 8 | 3,721 | 0.90 | 0.42 | 442,147 | 0.94 | 0.38 |
| Mathematics 11 | 3,037 | 0.88 | 0.48 | 423,594 | 0.93 | 0.43 |

Table 8.D. Reliabilities and SEMs by Military Status

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Content Area and Grade** | **Military N** | **Military Reliability** | **Military SEM** | **Non-Military N** | **Non-Military Reliability** | **Non-Military SEM** |
| ELA 3 | 4,797 | 0.91 | 0.29 | 432,286 | 0.92 | 0.30 |
| ELA 4 | 4,400 | 0.90 | 0.32 | 422,473 | 0.92 | 0.32 |
| ELA 5 | 4,436 | 0.91 | 0.31 | 440,425 | 0.92 | 0.32 |
| ELA 6 | 4,268 | 0.91 | 0.32 | 445,626 | 0.92 | 0.32 |
| ELA 7 | 4,335 | 0.91 | 0.33 | 455,873 | 0.92 | 0.34 |
| ELA 8 | 4,686 | 0.91 | 0.33 | 446,854 | 0.92 | 0.34 |
| ELA 11 | 5,935 | 0.91 | 0.37 | 414,421 | 0.92 | 0.38 |
| Mathematics 3 | 4,782 | 0.94 | 0.24 | 432,978 | 0.95 | 0.24 |
| Mathematics 4 | 4,414 | 0.94 | 0.24 | 424,186 | 0.94 | 0.25 |
| Mathematics 5 | 4,457 | 0.94 | 0.28 | 443,347 | 0.94 | 0.30 |
| Mathematics 6 | 4,225 | 0.93 | 0.30 | 442,685 | 0.94 | 0.33 |
| Mathematics 7 | 4,348 | 0.94 | 0.33 | 457,887 | 0.94 | 0.36 |
| Mathematics 8 | 4,644 | 0.94 | 0.36 | 441,224 | 0.94 | 0.38 |
| Mathematics 11 | 5,995 | 0.92 | 0.42 | 420,636 | 0.93 | 0.43 |

Table 8.D. Reliabilities and SEMs by Homeless Status

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Content Area and Grade** | **Homeless N** | **Homeless Reliability** | **Homeless SEM** | **Non-Homeless N** | **Non-Homeless Reliability** | **Non-Homeless SEM** |
| ELA 3 | 17,674 | 0.90 | 0.31 | 419,409 | 0.92 | 0.30 |
| ELA 4 | 17,370 | 0.91 | 0.33 | 409,503 | 0.92 | 0.32 |
| ELA 5 | 17,914 | 0.92 | 0.31 | 426,947 | 0.92 | 0.32 |
| ELA 6 | 16,615 | 0.91 | 0.33 | 433,279 | 0.92 | 0.32 |
| ELA 7 | 14,836 | 0.91 | 0.34 | 445,372 | 0.92 | 0.34 |
| ELA 8 | 14,978 | 0.90 | 0.35 | 436,562 | 0.92 | 0.34 |
| ELA 11 | 13,066 | 0.91 | 0.39 | 407,290 | 0.92 | 0.38 |
| Mathematics 3 | 17,861 | 0.93 | 0.25 | 419,899 | 0.95 | 0.24 |
| Mathematics 4 | 17,600 | 0.93 | 0.26 | 411,000 | 0.94 | 0.25 |
| Mathematics 5 | 18,161 | 0.91 | 0.32 | 429,643 | 0.94 | 0.29 |
| Mathematics 6 | 16,566 | 0.92 | 0.36 | 430,344 | 0.94 | 0.32 |
| Mathematics 7 | 14,967 | 0.91 | 0.39 | 447,268 | 0.94 | 0.35 |
| Mathematics 8 | 14,990 | 0.91 | 0.42 | 430,878 | 0.94 | 0.38 |
| Mathematics 11 | 13,020 | 0.88 | 0.49 | 413,611 | 0.93 | 0.43 |

Table 8.D. Reliabilities and SEMs by Primary Ethnicity for Not Economically Disadvantaged

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Content Area and Grade** | **American Indian or Alaska Native N** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian N** | **Asian Reliability** | **Asian SEM** |
| ELA 3 | 646 | 0.92 | 0.30 | 24,825 | 0.89 | 0.29 |
| ELA 4 | 600 | 0.91 | 0.32 | 23,129 | 0.88 | 0.32 |
| ELA 5 | 703 | 0.92 | 0.31 | 24,045 | 0.87 | 0.33 |
| ELA 6 | 775 | 0.91 | 0.32 | 24,679 | 0.87 | 0.33 |
| ELA 7 | 815 | 0.92 | 0.34 | 24,351 | 0.86 | 0.34 |
| ELA 8 | 846 | 0.92 | 0.34 | 24,470 | 0.87 | 0.34 |
| ELA 11 | 885 | 0.91 | 0.38 | 21,099 | 0.88 | 0.37 |
| Mathematics 3 | 643 | 0.94 | 0.24 | 24,444 | 0.93 | 0.23 |
| Mathematics 4 | 599 | 0.94 | 0.24 | 22,788 | 0.92 | 0.23 |
| Mathematics 5 | 704 | 0.94 | 0.29 | 23,819 | 0.93 | 0.25 |
| Mathematics 6 | 766 | 0.93 | 0.31 | 23,627 | 0.93 | 0.27 |
| Mathematics 7 | 816 | 0.93 | 0.35 | 24,135 | 0.93 | 0.29 |
| Mathematics 8 | 840 | 0.93 | 0.38 | 21,888 | 0.94 | 0.31 |
| Mathematics 11 | 885 | 0.91 | 0.42 | 22,616 | 0.95 | 0.32 |

Table 8.D.24 Reliabilities and SEMs by Primary Ethnicity for Not Economically Disadvantaged (Continued One)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Content Area and Grade** | **Native Hawaiian or Other Pacific Islander N** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino N** | **Filipino Reliability** | **Filipino SEM** |
| ELA 3 | 527 | 0.91 | 0.30 | 5,295 | 0.90 | 0.29 |
| ELA 4 | 571 | 0.91 | 0.32 | 5,175 | 0.89 | 0.32 |
| ELA 5 | 664 | 0.91 | 0.31 | 5,619 | 0.89 | 0.32 |
| ELA 6 | 672 | 0.91 | 0.32 | 5,873 | 0.88 | 0.32 |
| ELA 7 | 702 | 0.90 | 0.33 | 6,448 | 0.87 | 0.34 |
| ELA 8 | 773 | 0.91 | 0.33 | 6,900 | 0.88 | 0.33 |
| ELA 11 | 841 | 0.91 | 0.37 | 7,782 | 0.88 | 0.36 |
| Mathematics 3 | 526 | 0.94 | 0.23 | 5,324 | 0.93 | 0.23 |
| Mathematics 4 | 580 | 0.94 | 0.24 | 5,260 | 0.93 | 0.23 |
| Mathematics 5 | 668 | 0.93 | 0.27 | 5,738 | 0.93 | 0.26 |
| Mathematics 6 | 664 | 0.93 | 0.31 | 5,915 | 0.93 | 0.28 |
| Mathematics 7 | 719 | 0.93 | 0.32 | 6,629 | 0.94 | 0.30 |
| Mathematics 8 | 764 | 0.94 | 0.37 | 6,882 | 0.94 | 0.33 |
| Mathematics 11 | 843 | 0.92 | 0.41 | 8,168 | 0.93 | 0.36 |

Table 8.D.24 Reliabilities and SEMs by Primary Ethnicity for Not Economically Disadvantaged (Continued Two)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Content Area and Grade** | **Hispanic or Latino N** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American N** | **Black or African American Reliability** | **Black or African American SEM** | **White N** | **White Reliability** | **White SEM** |
| ELA 3 | 47,648 | 0.91 | 0.30 | 4,963 | 0.92 | 0.30 | 65,403 | 0.90 | 0.29 |
| ELA 4 | 46,869 | 0.91 | 0.32 | 5,081 | 0.91 | 0.32 | 63,671 | 0.89 | 0.32 |
| ELA 5 | 48,844 | 0.91 | 0.31 | 5,693 | 0.92 | 0.31 | 66,328 | 0.89 | 0.32 |
| ELA 6 | 50,068 | 0.91 | 0.32 | 5,926 | 0.92 | 0.32 | 68,318 | 0.89 | 0.32 |
| ELA 7 | 53,551 | 0.91 | 0.33 | 6,570 | 0.92 | 0.34 | 70,428 | 0.89 | 0.33 |
| ELA 8 | 52,783 | 0.91 | 0.33 | 6,599 | 0.92 | 0.34 | 71,566 | 0.90 | 0.33 |
| ELA 11 | 55,874 | 0.91 | 0.37 | 7,479 | 0.92 | 0.38 | 69,080 | 0.90 | 0.37 |
| Mathematics 3 | 48,041 | 0.94 | 0.24 | 4,969 | 0.94 | 0.24 | 65,506 | 0.94 | 0.23 |
| Mathematics 4 | 47,448 | 0.94 | 0.24 | 5,103 | 0.94 | 0.25 | 64,120 | 0.94 | 0.23 |
| Mathematics 5 | 49,471 | 0.93 | 0.28 | 5,702 | 0.93 | 0.30 | 67,208 | 0.94 | 0.26 |
| Mathematics 6 | 50,233 | 0.93 | 0.31 | 5,872 | 0.93 | 0.33 | 68,732 | 0.93 | 0.29 |
| Mathematics 7 | 54,209 | 0.93 | 0.34 | 6,550 | 0.93 | 0.36 | 71,749 | 0.94 | 0.31 |
| Mathematics 8 | 52,762 | 0.93 | 0.37 | 6,527 | 0.92 | 0.39 | 71,046 | 0.94 | 0.34 |
| Mathematics 11 | 56,596 | 0.92 | 0.43 | 7,484 | 0.91 | 0.45 | 72,472 | 0.94 | 0.37 |

Table 8.D. Reliabilities and SEMs by Primary Ethnicity for Economically Disadvantaged

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Content Area and Grade** | **American Indian or Alaska Native N** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian N** | **Asian Reliability** | **Asian SEM** |
| ELA 3 | 1,447 | 0.90 | 0.31 | 14,164 | 0.92 | 0.30 |
| ELA 4 | 1,407 | 0.90 | 0.33 | 13,872 | 0.91 | 0.32 |
| ELA 5 | 1,459 | 0.92 | 0.32 | 14,887 | 0.92 | 0.32 |
| ELA 6 | 1,548 | 0.90 | 0.33 | 14,810 | 0.92 | 0.32 |
| ELA 7 | 1,543 | 0.91 | 0.34 | 15,288 | 0.91 | 0.34 |
| ELA 8 | 1,518 | 0.90 | 0.35 | 15,800 | 0.91 | 0.34 |
| ELA 11 | 1,306 | 0.91 | 0.39 | 15,808 | 0.91 | 0.37 |
| Mathematics 3 | 1,437 | 0.93 | 0.25 | 14,260 | 0.94 | 0.23 |
| Mathematics 4 | 1,404 | 0.92 | 0.26 | 14,025 | 0.94 | 0.24 |
| Mathematics 5 | 1,461 | 0.91 | 0.33 | 15,116 | 0.94 | 0.27 |
| Mathematics 6 | 1,514 | 0.91 | 0.37 | 14,900 | 0.94 | 0.30 |
| Mathematics 7 | 1,527 | 0.91 | 0.39 | 15,486 | 0.94 | 0.32 |
| Mathematics 8 | 1,495 | 0.90 | 0.42 | 15,484 | 0.94 | 0.35 |
| Mathematics 11 | 1,277 | 0.87 | 0.49 | 16,315 | 0.94 | 0.37 |

Table 8.D.25 Reliabilities and SEMs by Primary Ethnicity for Economically Disadvantaged (Continued One)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Content Area and Grade** | **Native Hawaiian or Other Pacific Islander N** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino N** | **Filipino Reliability** | **Filipino SEM** |
| ELA 3 | 1,348 | 0.90 | 0.31 | 3,087 | 0.91 | 0.29 |
| ELA 4 | 1,325 | 0.90 | 0.32 | 3,050 | 0.90 | 0.32 |
| ELA 5 | 1,394 | 0.91 | 0.31 | 3,223 | 0.91 | 0.31 |
| ELA 6 | 1,462 | 0.91 | 0.32 | 3,167 | 0.91 | 0.32 |
| ELA 7 | 1,386 | 0.90 | 0.33 | 3,634 | 0.90 | 0.33 |
| ELA 8 | 1,389 | 0.90 | 0.34 | 3,648 | 0.90 | 0.33 |
| ELA 11 | 1,246 | 0.91 | 0.38 | 4,012 | 0.90 | 0.37 |
| Mathematics 3 | 1,343 | 0.93 | 0.25 | 3,111 | 0.94 | 0.23 |
| Mathematics 4 | 1,318 | 0.93 | 0.25 | 3,088 | 0.94 | 0.24 |
| Mathematics 5 | 1,401 | 0.92 | 0.31 | 3,282 | 0.93 | 0.28 |
| Mathematics 6 | 1,430 | 0.92 | 0.34 | 3,189 | 0.94 | 0.30 |
| Mathematics 7 | 1,384 | 0.91 | 0.37 | 3,713 | 0.93 | 0.33 |
| Mathematics 8 | 1,387 | 0.91 | 0.40 | 3,647 | 0.93 | 0.36 |
| Mathematics 11 | 1,218 | 0.89 | 0.46 | 4,080 | 0.92 | 0.39 |

Table 8.D.25 Reliabilities and SEMs by Primary Ethnicity for Economically Disadvantaged (Continued Two)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Content Area and Grade** | **Hispanic or Latino N** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American N** | **Black or African American Reliability** | **Black or African American SEM** | **White N** | **White Reliability** | **White SEM** |
| ELA 3 | 194,848 | 0.90 | 0.31 | 18,323 | 0.90 | 0.32 | 31,795 | 0.91 | 0.30 |
| ELA 4 | 191,879 | 0.90 | 0.32 | 17,835 | 0.90 | 0.33 | 30,791 | 0.91 | 0.32 |
| ELA 5 | 201,705 | 0.91 | 0.31 | 18,482 | 0.91 | 0.32 | 31,058 | 0.92 | 0.31 |
| ELA 6 | 202,264 | 0.91 | 0.32 | 18,191 | 0.91 | 0.33 | 31,800 | 0.91 | 0.32 |
| ELA 7 | 205,830 | 0.91 | 0.34 | 18,006 | 0.91 | 0.34 | 31,741 | 0.91 | 0.34 |
| ELA 8 | 198,414 | 0.90 | 0.34 | 17,502 | 0.90 | 0.35 | 30,739 | 0.91 | 0.34 |
| ELA 11 | 176,280 | 0.91 | 0.38 | 15,326 | 0.91 | 0.39 | 26,963 | 0.92 | 0.38 |
| Mathematics 3 | 195,378 | 0.93 | 0.25 | 18,200 | 0.93 | 0.26 | 31,853 | 0.94 | 0.24 |
| Mathematics 4 | 192,593 | 0.93 | 0.26 | 17,711 | 0.92 | 0.27 | 30,905 | 0.94 | 0.25 |
| Mathematics 5 | 202,628 | 0.91 | 0.31 | 18,393 | 0.90 | 0.33 | 31,251 | 0.93 | 0.30 |
| Mathematics 6 | 200,588 | 0.92 | 0.35 | 17,691 | 0.91 | 0.38 | 31,537 | 0.93 | 0.33 |
| Mathematics 7 | 205,620 | 0.91 | 0.38 | 17,716 | 0.89 | 0.41 | 31,764 | 0.93 | 0.36 |
| Mathematics 8 | 197,119 | 0.91 | 0.41 | 17,105 | 0.89 | 0.43 | 30,521 | 0.92 | 0.39 |
| Mathematics 11 | 175,657 | 0.88 | 0.47 | 15,021 | 0.85 | 0.50 | 27,060 | 0.91 | 0.44 |

Table 8.D. Claim Reliabilities and SEM by Gender, Economic Status, and Migrant Status for Grade Three—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Male Reliability** | **Male SEM** | **Female Reliability** | **Female SEM** | **Not Economically Disadvantaged Reliability** | **Not Economically Disadvantaged SEM** | **Economically Disadvantaged Reliability** | **Economically Disadvantaged SEM** | **Migrant Reliability** | **Migrant SEM** | **Not Migrant Reliability** | **Not Migrant SEM** |
| Claim 1 | **14–16** | **14–16** | 0.73 | 0.56 | 0.74 | 0.55 | 0.72 | 0.54 | 0.70 | 0.56 | 0.65 | 0.58 | 0.74 | 0.55 |
| Claim 2 | **8** | **9** | 0.70 | 0.64 | 0.70 | 0.63 | 0.67 | 0.63 | 0.68 | 0.64 | 0.66 | 0.66 | 0.70 | 0.64 |
| Claim 3 | **8–9** | **8–9** | 0.52 | 0.84 | 0.51 | 0.81 | 0.48 | 0.79 | 0.48 | 0.85 | 0.45 | 0.88 | 0.51 | 0.82 |
| Claim 4 | **9** | **9** | 0.70 | 0.68 | 0.69 | 0.67 | 0.68 | 0.65 | 0.67 | 0.68 | 0.64 | 0.70 | 0.70 | 0.67 |

Table 8.D. Claim Reliabilities and SEM by Gender, Economic Status, and Migrant Status for Grade Four—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Male Reliability** | **Male SEM** | **Female Reliability** | **Female SEM** | **Not Economically Disadvantaged Reliability** | **Not Economically Disadvantaged SEM** | **Economically Disadvantaged Reliability** | **Economically Disadvantaged SEM** | **Migrant Reliability** | **Migrant SEM** | **Not Migrant Reliability** | **Not Migrant SEM** |
| Claim 1 | **14–16** | **14–16** | 0.75 | 0.58 | 0.74 | 0.57 | 0.73 | 0.55 | 0.71 | 0.59 | 0.68 | 0.61 | 0.75 | 0.58 |
| Claim 2 | **8** | **9** | 0.69 | 0.70 | 0.68 | 0.69 | 0.64 | 0.70 | 0.67 | 0.69 | 0.67 | 0.70 | 0.69 | 0.69 |
| Claim 3 | **8–9** | **8–9** | 0.52 | 0.91 | 0.49 | 0.90 | 0.44 | 0.88 | 0.49 | 0.92 | 0.48 | 0.93 | 0.51 | 0.90 |
| Claim 4 | **9** | **9** | 0.69 | 0.72 | 0.68 | 0.72 | 0.65 | 0.71 | 0.67 | 0.73 | 0.66 | 0.73 | 0.69 | 0.72 |

Table 8.D. Claim Reliabilities and SEM by Gender, Economic Status, and Migrant Status for Grade Five—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Male Reliability** | **Male SEM** | **Female Reliability** | **Female SEM** | **Not Economically Disadvantaged Reliability** | **Not Economically Disadvantaged SEM** | **Economically Disadvantaged Reliability** | **Economically Disadvantaged SEM** | **Migrant Reliability** | **Migrant SEM** | **Not Migrant Reliability** | **Not Migrant SEM** |
| Claim 1 | **14–16** | **14–16** | 0.74 | 0.59 | 0.73 | 0.58 | 0.69 | 0.59 | 0.72 | 0.58 | 0.70 | 0.60 | 0.74 | 0.58 |
| Claim 2 | **8** | **9** | 0.71 | 0.69 | 0.69 | 0.69 | 0.65 | 0.70 | 0.70 | 0.68 | 0.70 | 0.68 | 0.71 | 0.69 |
| Claim 3 | **8–9** | **8–9** | 0.54 | 0.89 | 0.49 | 0.88 | 0.46 | 0.88 | 0.50 | 0.89 | 0.50 | 0.89 | 0.52 | 0.88 |
| Claim 4 | **9** | **9** | 0.75 | 0.63 | 0.73 | 0.63 | 0.70 | 0.63 | 0.73 | 0.63 | 0.73 | 0.63 | 0.74 | 0.63 |

Table 8.D. Claim Reliabilities and SEM by Gender, Economic Status, and Migrant Status for Grade Six—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Male Reliability** | **Male SEM** | **Female Reliability** | **Female SEM** | **Not Economically Disadvantaged Reliability** | **Not Economically Disadvantaged SEM** | **Economically Disadvantaged Reliability** | **Economically Disadvantaged SEM** | **Migrant Reliability** | **Migrant SEM** | **Not Migrant Reliability** | **Not Migrant SEM** |
| Claim 1 | **14–17** | **14–17** | 0.75 | 0.63 | 0.74 | 0.61 | 0.74 | 0.59 | 0.71 | 0.64 | 0.68 | 0.67 | 0.75 | 0.62 |
| Claim 2 | **8** | **9** | 0.73 | 0.64 | 0.69 | 0.63 | 0.66 | 0.63 | 0.71 | 0.63 | 0.71 | 0.64 | 0.72 | 0.63 |
| Claim 3 | **8–9** | **8–9** | 0.52 | 0.90 | 0.48 | 0.90 | 0.38 | 0.92 | 0.51 | 0.89 | 0.52 | 0.90 | 0.50 | 0.90 |
| Claim 4 | **9** | **9** | 0.70 | 0.73 | 0.67 | 0.72 | 0.65 | 0.71 | 0.68 | 0.74 | 0.69 | 0.74 | 0.69 | 0.73 |

Table 8.D. Claim Reliabilities and SEM by Gender, Economic Status, and Migrant Status for Grade Seven—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Male Reliability** | **Male SEM** | **Female Reliability** | **Female SEM** | **Not Economically Disadvantaged Reliability** | **Not Economically Disadvantaged SEM** | **Economically Disadvantaged Reliability** | **Economically Disadvantaged SEM** | **Migrant Reliability** | **Migrant SEM** | **Not Migrant Reliability** | **Not Migrant SEM** |
| Claim 1 | **14–17** | **14–17** | 0.75 | 0.62 | 0.74 | 0.60 | 0.73 | 0.60 | 0.73 | 0.62 | 0.69 | 0.63 | 0.75 | 0.61 |
| Claim 2 | **8** | **9** | 0.71 | 0.69 | 0.68 | 0.67 | 0.65 | 0.66 | 0.69 | 0.69 | 0.69 | 0.71 | 0.70 | 0.68 |
| Claim 3 | **8–9** | **8–9** | 0.47 | 0.95 | 0.43 | 0.95 | 0.34 | 0.96 | 0.45 | 0.94 | 0.46 | 0.94 | 0.45 | 0.95 |
| Claim 4 | **9** | **9** | 0.71 | 0.76 | 0.67 | 0.75 | 0.64 | 0.74 | 0.68 | 0.76 | 0.68 | 0.76 | 0.69 | 0.75 |

Table 8.D. Claim Reliabilities and SEM by Gender, Economic Status, and Migrant Status for Grade Eight—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Male Reliability** | **Male SEM** | **Female Reliability** | **Female SEM** | **Not Economically Disadvantaged Reliability** | **Not Economically Disadvantaged SEM** | **Economically Disadvantaged Reliability** | **Economically Disadvantaged SEM** | **Migrant Reliability** | **Migrant SEM** | **Not Migrant Reliability** | **Not Migrant SEM** |
| Claim 1 | **14–17** | **14–17** | 0.73 | 0.66 | 0.74 | 0.63 | 0.74 | 0.61 | 0.70 | 0.66 | 0.66 | 0.69 | 0.74 | 0.64 |
| Claim 2 | **8** | **9** | 0.70 | 0.69 | 0.66 | 0.68 | 0.64 | 0.69 | 0.68 | 0.68 | 0.68 | 0.69 | 0.69 | 0.69 |
| Claim 3 | **8–9** | **8–9** | 0.49 | 0.90 | 0.45 | 0.90 | 0.40 | 0.90 | 0.46 | 0.90 | 0.45 | 0.90 | 0.48 | 0.90 |
| Claim 4 | **9** | **9** | 0.69 | 0.74 | 0.67 | 0.72 | 0.66 | 0.71 | 0.67 | 0.74 | 0.65 | 0.75 | 0.69 | 0.73 |

Table 8.D. Claim Reliabilities and SEM by Gender, Economic Status, and Migrant Status for Grade Eleven—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Male Reliability** | **Male SEM** | **Female Reliability** | **Female SEM** | **Not Economically Disadvantaged Reliability** | **Not Economically Disadvantaged SEM** | **Economically Disadvantaged Reliability** | **Economically Disadvantaged SEM** | **Migrant Reliability** | **Migrant SEM** | **Not Migrant Reliability** | **Not Migrant SEM** |
| Claim 1 | **15–16** | **15–16** | 0.75 | 0.67 | 0.73 | 0.65 | 0.74 | 0.65 | 0.73 | 0.67 | 0.71 | 0.69 | 0.75 | 0.66 |
| Claim 2 | **8** | **9** | 0.70 | 0.77 | 0.67 | 0.75 | 0.67 | 0.75 | 0.69 | 0.77 | 0.68 | 0.77 | 0.69 | 0.76 |
| Claim 3 | **8–9** | **8–9** | 0.46 | 1.03 | 0.42 | 1.02 | 0.41 | 1.01 | 0.43 | 1.03 | 0.43 | 1.03 | 0.44 | 1.02 |
| Claim 4 | **9** | **9** | 0.67 | 0.83 | 0.63 | 0.81 | 0.63 | 0.81 | 0.65 | 0.83 | 0.64 | 0.83 | 0.66 | 0.82 |

Table 8.D. Claim Reliabilities and SEM by Gender, Economic Status, and Migrant Status for Grade Three—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Male Reliability** | **Male SEM** | **Female Reliability** | **Female SEM** | **Not Economically Disadvantaged Reliability** | **Not Economically Disadvantaged SEM** | **Economically Disadvantaged Reliability** | **Economically Disadvantaged SEM** | **Migrant Reliability** | **Migrant SEM** | **Not Migrant Reliability** | **Not Migrant SEM** |
| Claim 1 | **17–20** | **17–20** | 0.90 | 0.34 | 0.89 | 0.34 | 0.88 | 0.34 | 0.89 | 0.34 | 0.88 | 0.34 | 0.90 | 0.34 |
| Claim 2 | **8–10** | **8** | 0.73 | 0.54 | 0.72 | 0.55 | 0.74 | 0.50 | 0.67 | 0.57 | 0.61 | 0.58 | 0.72 | 0.54 |
| Claim 3 | **8–10** | **8** | 0.75 | 0.56 | 0.74 | 0.55 | 0.76 | 0.51 | 0.69 | 0.58 | 0.65 | 0.60 | 0.74 | 0.56 |

Table 8.D. Claim Reliabilities and SEM by Gender, Economic Status, and Migrant Status for Grade Four—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Male Reliability** | **Male SEM** | **Female Reliability** | **Female SEM** | **Not Economically Disadvantaged Reliability** | **Not Economically Disadvantaged SEM** | **Economically Disadvantaged Reliability** | **Economically Disadvantaged SEM** | **Migrant Reliability** | **Migrant SEM** | **Not Migrant Reliability** | **Not Migrant SEM** |
| Claim 1 | **17–20** | **17–20** | 0.90 | 0.34 | 0.89 | 0.34 | 0.89 | 0.33 | 0.89 | 0.35 | 0.87 | 0.35 | 0.90 | 0.34 |
| Claim 2 | **8–10** | **8** | 0.75 | 0.54 | 0.74 | 0.54 | 0.74 | 0.51 | 0.70 | 0.55 | 0.67 | 0.57 | 0.74 | 0.54 |
| Claim 3 | **8–10** | **8** | 0.73 | 0.59 | 0.72 | 0.58 | 0.75 | 0.53 | 0.67 | 0.61 | 0.62 | 0.64 | 0.73 | 0.58 |

Table 8.D. Claim Reliabilities and SEM by Gender, Economic Status, and Migrant Status for Grade Five—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Male Reliability** | **Male SEM** | **Female Reliability** | **Female SEM** | **Not Economically Disadvantaged Reliability** | **Not Economically Disadvantaged SEM** | **Economically Disadvantaged Reliability** | **Economically Disadvantaged SEM** | **Migrant Reliability** | **Migrant SEM** | **Not Migrant Reliability** | **Not Migrant SEM** |
| Claim 1 | **17–20** | **17–20** | 0.90 | 0.41 | 0.88 | 0.40 | 0.89 | 0.38 | 0.87 | 0.42 | 0.85 | 0.43 | 0.89 | 0.40 |
| Claim 2 | **8–10** | **8** | 0.70 | 0.60 | 0.68 | 0.60 | 0.73 | 0.54 | 0.60 | 0.63 | 0.53 | 0.66 | 0.69 | 0.60 |
| Claim 3 | **8–10** | **8** | 0.69 | 0.70 | 0.67 | 0.70 | 0.71 | 0.63 | 0.61 | 0.74 | 0.53 | 0.75 | 0.68 | 0.70 |

Table 8.D. Claim Reliabilities and SEM by Gender, Economic Status, and Migrant Status for Grade Six—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Male Reliability** | **Male SEM** | **Female Reliability** | **Female SEM** | **Not Economically Disadvantaged Reliability** | **Not Economically Disadvantaged SEM** | **Economically Disadvantaged Reliability** | **Economically Disadvantaged SEM** | **Migrant Reliability** | **Migrant SEM** | **Not Migrant Reliability** | **Not Migrant SEM** |
| Claim 1 | **16–20** | **16–20** | 0.89 | 0.46 | 0.88 | 0.45 | 0.88 | 0.43 | 0.87 | 0.47 | 0.86 | 0.49 | 0.89 | 0.45 |
| Claim 2 | **8–10** | **8** | 0.73 | 0.66 | 0.71 | 0.66 | 0.75 | 0.59 | 0.64 | 0.70 | 0.58 | 0.72 | 0.72 | 0.66 |
| Claim 3 | **8–10** | **8** | 0.71 | 0.73 | 0.70 | 0.72 | 0.74 | 0.66 | 0.63 | 0.76 | 0.58 | 0.79 | 0.71 | 0.72 |

Table 8.D. Claim Reliabilities and SEM by Gender, Economic Status, and Migrant Status for Grade Seven—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Male Reliability** | **Male SEM** | **Female Reliability** | **Female SEM** | **Not Economically Disadvantaged Reliability** | **Not Economically Disadvantaged SEM** | **Economically Disadvantaged Reliability** | **Economically Disadvantaged SEM** | **Migrant Reliability** | **Migrant SEM** | **Not Migrant Reliability** | **Not Migrant SEM** |
| Claim 1 | **16–20** | **16–20** | 0.90 | 0.47 | 0.89 | 0.46 | 0.90 | 0.43 | 0.87 | 0.49 | 0.84 | 0.51 | 0.89 | 0.47 |
| Claim 2 | **8–10** | **8** | 0.68 | 0.78 | 0.67 | 0.78 | 0.73 | 0.69 | 0.57 | 0.83 | 0.48 | 0.87 | 0.68 | 0.78 |
| Claim 3 | **8–10** | **8** | 0.62 | 0.91 | 0.62 | 0.89 | 0.67 | 0.81 | 0.52 | 0.95 | 0.44 | 0.99 | 0.62 | 0.90 |

Table 8.D. Claim Reliabilities and SEM by Gender, Economic Status, and Migrant Status for Grade Eight—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Male Reliability** | **Male SEM** | **Female Reliability** | **Female SEM** | **Not Economically Disadvantaged Reliability** | **Not Economically Disadvantaged SEM** | **Economically Disadvantaged Reliability** | **Economically Disadvantaged SEM** | **Migrant Reliability** | **Migrant SEM** | **Not Migrant Reliability** | **Not Migrant SEM** |
| Claim 1 | **16–20** | **16–20** | 0.89 | 0.54 | 0.88 | 0.52 | 0.89 | 0.50 | 0.86 | 0.55 | 0.84 | 0.56 | 0.88 | 0.53 |
| Claim 2 | **8–10** | **8** | 0.73 | 0.79 | 0.73 | 0.78 | 0.77 | 0.70 | 0.64 | 0.84 | 0.58 | 0.87 | 0.73 | 0.78 |
| Claim 3 | **8–10** | **8** | 0.65 | 0.92 | 0.65 | 0.88 | 0.70 | 0.82 | 0.56 | 0.94 | 0.51 | 0.98 | 0.65 | 0.90 |

Table 8.D. Claim Reliabilities and SEM by Gender, Economic Status, and Migrant Status for Grade Eleven—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Male Reliability** | **Male SEM** | **Female Reliability** | **Female SEM** | **Not Economically Disadvantaged Reliability** | **Not Economically Disadvantaged SEM** | **Economically Disadvantaged Reliability** | **Economically Disadvantaged SEM** | **Migrant Reliability** | **Migrant SEM** | **Not Migrant Reliability** | **Not Migrant SEM** |
| Claim 1 | **19–22** | **19–22** | 0.89 | 0.55 | 0.89 | 0.52 | 0.91 | 0.49 | 0.85 | 0.56 | 0.82 | 0.59 | 0.89 | 0.53 |
| Claim 2 | **8–10** | **8** | 0.58 | 1.06 | 0.54 | 1.04 | 0.65 | 0.94 | 0.41 | 1.13 | 0.32 | 1.15 | 0.56 | 1.05 |
| Claim 3 | **8–10** | **8** | 0.56 | 1.10 | 0.53 | 1.07 | 0.63 | 1.00 | 0.41 | 1.15 | 0.33 | 1.19 | 0.55 | 1.09 |

Table 8.D. Claim Reliabilities and SEM by Military Status and Homeless Status for Grade Three—ELA

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Military Reliability** | **Military SEM** | **Not Military Reliability** | **Not Military SEM** | **Homeless Reliability** | **Homeless SEM** | **Not Homeless Reliability** | **Not Homeless SEM** |
| Claim 1 | **14–16** | **14–16** | 0.73 | 0.54 | 0.74 | 0.55 | 0.69 | 0.57 | 0.74 | 0.55 |
| Claim 2 | **8** | **9** | 0.68 | 0.63 | 0.70 | 0.64 | 0.67 | 0.65 | 0.70 | 0.64 |
| Claim 3 | **8–9** | **8–9** | 0.49 | 0.80 | 0.51 | 0.83 | 0.47 | 0.86 | 0.51 | 0.82 |
| Claim 4 | **9** | **9** | 0.68 | 0.66 | 0.70 | 0.67 | 0.66 | 0.69 | 0.70 | 0.67 |

Table 8.D. Claim Reliabilities and SEM by Military Status and Homeless Status for Grade Four—ELA

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Military Reliability** | **Military SEM** | **Not Military Reliability** | **Not Military SEM** | **Homeless Reliability** | **Homeless SEM** | **Not Homeless Reliability** | **Not Homeless SEM** |
| Claim 1 | **14–16** | **14–16** | 0.73 | 0.56 | 0.75 | 0.58 | 0.70 | 0.60 | 0.75 | 0.57 |
| Claim 2 | **8** | **9** | 0.65 | 0.69 | 0.69 | 0.69 | 0.67 | 0.70 | 0.68 | 0.69 |
| Claim 3 | **8–9** | **8–9** | 0.46 | 0.88 | 0.51 | 0.90 | 0.48 | 0.93 | 0.50 | 0.90 |
| Claim 4 | **9** | **9** | 0.66 | 0.72 | 0.69 | 0.72 | 0.66 | 0.73 | 0.69 | 0.72 |

Table 8.D. Claim Reliabilities and SEM by Military Status and Homeless Status for Grade Five—ELA

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Military Reliability** | **Military SEM** | **Not Military Reliability** | **Not Military SEM** | **Homeless Reliability** | **Homeless SEM** | **Not Homeless Reliability** | **Not Homeless SEM** |
| Claim 1 | **14–16** | **14–16** | 0.71 | 0.58 | 0.74 | 0.58 | 0.71 | 0.59 | 0.74 | 0.58 |
| Claim 2 | **8** | **9** | 0.67 | 0.69 | 0.71 | 0.69 | 0.70 | 0.68 | 0.70 | 0.69 |
| Claim 3 | **8–9** | **8–9** | 0.48 | 0.88 | 0.52 | 0.88 | 0.50 | 0.89 | 0.52 | 0.88 |
| Claim 4 | **9** | **9** | 0.72 | 0.62 | 0.74 | 0.63 | 0.73 | 0.63 | 0.74 | 0.63 |

Table 8.D. Claim Reliabilities and SEM by Military Status and Homeless Status for Grade Six—ELA

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Military Reliability** | **Military SEM** | **Not Military Reliability** | **Not Military SEM** | **Homeless Reliability** | **Homeless SEM** | **Not Homeless Reliability** | **Not Homeless SEM** |
| Claim 1 | **14–17** | **14–17** | 0.74 | 0.60 | 0.75 | 0.62 | 0.70 | 0.66 | 0.75 | 0.62 |
| Claim 2 | **8** | **9** | 0.69 | 0.63 | 0.72 | 0.63 | 0.71 | 0.64 | 0.72 | 0.63 |
| Claim 3 | **8–9** | **8–9** | 0.43 | 0.90 | 0.50 | 0.90 | 0.52 | 0.89 | 0.50 | 0.90 |
| Claim 4 | **9** | **9** | 0.66 | 0.72 | 0.69 | 0.73 | 0.68 | 0.75 | 0.69 | 0.73 |

Table 8.D. Claim Reliabilities and SEM by Military Status and Homeless Status for Grade Seven—ELA

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Military Reliability** | **Military SEM** | **Not Military Reliability** | **Not Military SEM** | **Homeless Reliability** | **Homeless SEM** | **Not Homeless Reliability** | **Not Homeless SEM** |
| Claim 1 | **14–17** | **14–17** | 0.74 | 0.59 | 0.75 | 0.61 | 0.71 | 0.63 | 0.75 | 0.61 |
| Claim 2 | **8** | **9** | 0.68 | 0.66 | 0.70 | 0.68 | 0.69 | 0.70 | 0.70 | 0.68 |
| Claim 3 | **8–9** | **8–9** | 0.39 | 0.95 | 0.45 | 0.95 | 0.46 | 0.94 | 0.45 | 0.95 |
| Claim 4 | **9** | **9** | 0.66 | 0.75 | 0.69 | 0.75 | 0.68 | 0.77 | 0.69 | 0.75 |

Table 8.D. Claim Reliabilities and SEM by Military Status and Homeless Status for Grade Eight—ELA

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Military Reliability** | **Military SEM** | **Not Military Reliability** | **Not Military SEM** | **Homeless Reliability** | **Homeless SEM** | **Not Homeless Reliability** | **Not Homeless SEM** |
| Claim 1 | **14–17** | **14–17** | 0.74 | 0.63 | 0.74 | 0.64 | 0.68 | 0.68 | 0.74 | 0.64 |
| Claim 2 | **8** | **9** | 0.67 | 0.68 | 0.69 | 0.69 | 0.68 | 0.69 | 0.69 | 0.69 |
| Claim 3 | **8–9** | **8–9** | 0.43 | 0.89 | 0.48 | 0.90 | 0.46 | 0.90 | 0.48 | 0.90 |
| Claim 4 | **9** | **9** | 0.68 | 0.72 | 0.69 | 0.73 | 0.65 | 0.75 | 0.69 | 0.73 |

Table 8.D. Claim Reliabilities and SEM by Military Status and Homeless Status for Grade Eleven—ELA

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Military Reliability** | **Military SEM** | **Not Military Reliability** | **Not Military SEM** | **Homeless Reliability** | **Homeless SEM** | **Not Homeless Reliability** | **Not Homeless SEM** |
| Claim 1 | **15–16** | **15–16** | 0.74 | 0.66 | 0.75 | 0.66 | 0.72 | 0.69 | 0.75 | 0.66 |
| Claim 2 | **8** | **9** | 0.68 | 0.75 | 0.69 | 0.76 | 0.68 | 0.79 | 0.69 | 0.76 |
| Claim 3 | **8–9** | **8–9** | 0.42 | 1.01 | 0.44 | 1.02 | 0.42 | 1.04 | 0.44 | 1.02 |
| Claim 4 | **9** | **9** | 0.64 | 0.82 | 0.66 | 0.82 | 0.64 | 0.84 | 0.65 | 0.82 |

Table 8.D. Claim Reliabilities and SEM by Military Status and Homeless Status for Grade Three—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Military Reliability** | **Military SEM** | **Not Military Reliability** | **Not Military SEM** | **Homeless Reliability** | **Homeless SEM** | **Not Homeless Reliability** | **Not Homeless SEM** |
| Claim 1 | **17–20** | **17–20** | 0.89 | 0.34 | 0.90 | 0.34 | 0.89 | 0.35 | 0.90 | 0.34 |
| Claim 2 | **8–10** | **8** | 0.72 | 0.52 | 0.72 | 0.54 | 0.64 | 0.59 | 0.73 | 0.54 |
| Claim 3 | **8–10** | **8** | 0.74 | 0.53 | 0.74 | 0.56 | 0.67 | 0.60 | 0.74 | 0.56 |

Table 8.D. Claim Reliabilities and SEM by Military Status and Homeless Status for Grade Four—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Military Reliability** | **Military SEM** | **Not Military Reliability** | **Not Military SEM** | **Homeless Reliability** | **Homeless SEM** | **Not Homeless Reliability** | **Not Homeless SEM** |
| Claim 1 | **17–20** | **17–20** | 0.88 | 0.33 | 0.90 | 0.34 | 0.88 | 0.35 | 0.90 | 0.34 |
| Claim 2 | **8–10** | **8** | 0.73 | 0.52 | 0.74 | 0.54 | 0.68 | 0.57 | 0.75 | 0.54 |
| Claim 3 | **8–10** | **8** | 0.73 | 0.54 | 0.73 | 0.58 | 0.64 | 0.64 | 0.73 | 0.58 |

Table 8.D. Claim Reliabilities and SEM by Military Status and Homeless Status for Grade Five—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Military Reliability** | **Military SEM** | **Not Military Reliability** | **Not Military SEM** | **Homeless Reliability** | **Homeless SEM** | **Not Homeless Reliability** | **Not Homeless SEM** |
| Claim 1 | **17–20** | **17–20** | 0.88 | 0.38 | 0.89 | 0.40 | 0.86 | 0.43 | 0.89 | 0.40 |
| Claim 2 | **8–10** | **8** | 0.71 | 0.56 | 0.69 | 0.60 | 0.56 | 0.65 | 0.69 | 0.60 |
| Claim 3 | **8–10** | **8** | 0.69 | 0.66 | 0.68 | 0.70 | 0.57 | 0.76 | 0.68 | 0.70 |

Table 8.D. Claim Reliabilities and SEM by Military Status and Homeless Status for Grade Six—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Military Reliability** | **Military SEM** | **Not Military Reliability** | **Not Military SEM** | **Homeless Reliability** | **Homeless SEM** | **Not Homeless Reliability** | **Not Homeless SEM** |
| Claim 1 | **16–20** | **16–20** | 0.88 | 0.43 | 0.89 | 0.46 | 0.86 | 0.49 | 0.89 | 0.45 |
| Claim 2 | **8–10** | **8** | 0.72 | 0.62 | 0.72 | 0.66 | 0.61 | 0.72 | 0.72 | 0.66 |
| Claim 3 | **8–10** | **8** | 0.71 | 0.68 | 0.71 | 0.73 | 0.59 | 0.79 | 0.71 | 0.72 |

Table 8.D. Claim Reliabilities and SEM by Military Status and Homeless Status for Grade Seven—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Military Reliability** | **Military SEM** | **Not Military Reliability** | **Not Military SEM** | **Homeless Reliability** | **Homeless SEM** | **Not Homeless Reliability** | **Not Homeless SEM** |
| Claim 1 | **16–20** | **16–20** | 0.90 | 0.44 | 0.89 | 0.47 | 0.86 | 0.51 | 0.90 | 0.47 |
| Claim 2 | **8–10** | **8** | 0.69 | 0.73 | 0.68 | 0.78 | 0.53 | 0.86 | 0.68 | 0.78 |
| Claim 3 | **8–10** | **8** | 0.64 | 0.84 | 0.62 | 0.90 | 0.47 | 0.98 | 0.62 | 0.89 |

Table 8.D. Claim Reliabilities and SEM by Military Status and Homeless Status for Grade Eight—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Military Reliability** | **Military SEM** | **Not Military Reliability** | **Not Military SEM** | **Homeless Reliability** | **Homeless SEM** | **Not Homeless Reliability** | **Not Homeless SEM** |
| Claim 1 | **16–20** | **16–20** | 0.88 | 0.51 | 0.88 | 0.53 | 0.84 | 0.56 | 0.88 | 0.53 |
| Claim 2 | **8–10** | **8** | 0.73 | 0.75 | 0.73 | 0.78 | 0.59 | 0.87 | 0.73 | 0.78 |
| Claim 3 | **8–10** | **8** | 0.66 | 0.86 | 0.65 | 0.90 | 0.52 | 0.97 | 0.65 | 0.90 |

Table 8.D. Claim Reliabilities and SEM by Military Status and Homeless Status for Grade Eleven—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **Military Reliability** | **Military SEM** | **Not Military Reliability** | **Not Military SEM** | **Homeless Reliability** | **Homeless SEM** | **Not Homeless Reliability** | **Not Homeless SEM** |
| Claim 1 | **19–22** | **19–22** | 0.88 | 0.53 | 0.89 | 0.53 | 0.83 | 0.59 | 0.89 | 0.53 |
| Claim 2 | **8–10** | **8** | 0.54 | 1.04 | 0.56 | 1.05 | 0.30 | 1.18 | 0.57 | 1.05 |
| Claim 3 | **8–10** | **8** | 0.52 | 1.08 | 0.55 | 1.09 | 0.30 | 1.20 | 0.55 | 1.09 |

Table 8.D. Claim Reliabilities and SEM by Special Education Services Status and English Fluency for Grade Three—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **No Special Education Services Reliability** | **No Special Education Services SEM** | **With Special Education Services Reliability** | **With Special Education Services SEM** | **English Only Reliability** | **English Only SEM** | **Initially Fluent English Proficient (IFEP) Reliability** | **Initially Fluent English Proficient (IFEP) SEM** | **English Learner Reliability** | **English Learner SEM** | **Reclassified Fluent English Proficient (RFEP) Reliability** | **Reclassified Fluent English Proficient (RFEP) SEM** |
| Claim 1 | **14–16** | **14–16** | 0.73 | 0.55 | 0.66 | 0.59 | 0.74 | 0.55 | 0.68 | 0.53 | 0.58 | 0.59 | 0.67 | 0.52 |
| Claim 2 | **8** | **9** | 0.69 | 0.63 | 0.65 | 0.68 | 0.70 | 0.64 | 0.63 | 0.62 | 0.61 | 0.66 | 0.60 | 0.62 |
| Claim 3 | **8–9** | **8–9** | 0.50 | 0.81 | 0.43 | 0.93 | 0.51 | 0.81 | 0.39 | 0.77 | 0.37 | 0.90 | 0.40 | 0.77 |
| Claim 4 | **9** | **9** | 0.69 | 0.67 | 0.65 | 0.71 | 0.70 | 0.67 | 0.64 | 0.64 | 0.59 | 0.70 | 0.61 | 0.65 |

Table 8.D. Claim Reliabilities and SEM by Special Education Services Status and English Fluency for Grade Four—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **No Special Education Services Reliability** | **No Special Education Services SEM** | **With Special Education Services Reliability** | **With Special Education Services SEM** | **English Only Reliability** | **English Only SEM** | **IFEP Reliability** | **IFEP SEM** | **English Learner Reliability** | **English Learner SEM** | **RFEP Reliability** | **RFEP SEM** |
| Claim 1 | **14–16** | **14–16** | 0.74 | 0.57 | 0.67 | 0.63 | 0.75 | 0.57 | 0.69 | 0.55 | 0.59 | 0.62 | 0.66 | 0.54 |
| Claim 2 | **8** | **9** | 0.66 | 0.69 | 0.65 | 0.72 | 0.68 | 0.70 | 0.59 | 0.70 | 0.62 | 0.70 | 0.55 | 0.69 |
| Claim 3 | **8–9** | **8–9** | 0.47 | 0.89 | 0.47 | 0.98 | 0.50 | 0.89 | 0.36 | 0.87 | 0.42 | 0.95 | 0.34 | 0.87 |
| Claim 4 | **9** | **9** | 0.67 | 0.72 | 0.66 | 0.74 | 0.68 | 0.72 | 0.60 | 0.71 | 0.59 | 0.73 | 0.57 | 0.71 |

Table 8.D. Claim Reliabilities and SEM by Special Education Services Status and English Fluency for Grade Five—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **No Special Education Services Reliability** | **No Special Education Services SEM** | **With Special Education Services Reliability** | **With Special Education Services SEM** | **English Only Reliability** | **English Only SEM** | **IFEP Reliability** | **IFEP SEM** | **English Learner Reliability** | **English Learner SEM** | **RFEP Reliability** | **RFEP SEM** |
| Claim 1 | **14–16** | **14–16** | 0.73 | 0.58 | 0.66 | 0.62 | 0.73 | 0.58 | 0.64 | 0.60 | 0.56 | 0.60 | 0.64 | 0.56 |
| Claim 2 | **8** | **9** | 0.67 | 0.69 | 0.68 | 0.69 | 0.70 | 0.69 | 0.59 | 0.70 | 0.64 | 0.68 | 0.57 | 0.69 |
| Claim 3 | **8–9** | **8–9** | 0.49 | 0.88 | 0.51 | 0.91 | 0.51 | 0.88 | 0.40 | 0.88 | 0.39 | 0.89 | 0.37 | 0.88 |
| Claim 4 | **9** | **9** | 0.73 | 0.63 | 0.69 | 0.66 | 0.74 | 0.63 | 0.66 | 0.63 | 0.62 | 0.64 | 0.65 | 0.62 |

Table 8.D. Claim Reliabilities and SEM by Special Education Services Status and English Fluency for Grade Six—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **No Special Education Services Reliability** | **No Special Education Services SEM** | **With Special Education Services Reliability** | **With Special Education Services SEM** | **English Only Reliability** | **English Only SEM** | **IFEP Reliability** | **IFEP SEM** | **English Learner Reliability** | **English Learner SEM** | **RFEP Reliability** | **RFEP SEM** |
| Claim 1 | **14–17** | **14–17** | 0.74 | 0.61 | 0.58 | 0.72 | 0.75 | 0.61 | 0.72 | 0.58 | 0.45 | 0.71 | 0.70 | 0.59 |
| Claim 2 | **8** | **9** | 0.68 | 0.62 | 0.66 | 0.68 | 0.71 | 0.63 | 0.60 | 0.63 | 0.63 | 0.65 | 0.61 | 0.62 |
| Claim 3 | **8–9** | **8–9** | 0.45 | 0.90 | 0.48 | 0.92 | 0.48 | 0.90 | 0.27 | 0.93 | 0.41 | 0.90 | 0.37 | 0.89 |
| Claim 4 | **9** | **9** | 0.67 | 0.72 | 0.63 | 0.76 | 0.69 | 0.73 | 0.60 | 0.70 | 0.57 | 0.76 | 0.60 | 0.72 |

Table 8.D. Claim Reliabilities and SEM by Special Education Services Status and English Fluency for Grade Seven—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **No Special Education Services Reliability** | **No Special Education Services SEM** | **With Special Education Services Reliability** | **With Special Education Services SEM** | **English Only Reliability** | **English Only SEM** | **IFEP Reliability** | **IFEP SEM** | **English Learner Reliability** | **English Learner SEM** | **RFEP Reliability** | **RFEP SEM** |
| Claim 1 | **14–17** | **14–17** | 0.74 | 0.60 | 0.62 | 0.66 | 0.75 | 0.60 | 0.71 | 0.60 | 0.47 | 0.66 | 0.71 | 0.59 |
| Claim 2 | **8** | **9** | 0.68 | 0.67 | 0.61 | 0.76 | 0.70 | 0.67 | 0.60 | 0.66 | 0.58 | 0.74 | 0.63 | 0.65 |
| Claim 3 | **8–9** | **8–9** | 0.41 | 0.95 | 0.43 | 0.93 | 0.43 | 0.95 | 0.24 | 0.97 | 0.35 | 0.92 | 0.34 | 0.95 |
| Claim 4 | **9** | **9** | 0.67 | 0.75 | 0.63 | 0.77 | 0.69 | 0.75 | 0.61 | 0.73 | 0.58 | 0.77 | 0.62 | 0.75 |

Table 8.D. Claim Reliabilities and SEM by Special Education Services Status and English Fluency for Grade Eight—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **No Special Education Services Reliability** | **No Special Education Services SEM** | **With Special Education Services Reliability** | **With Special Education Services SEM** | **English Only Reliability** | **English Only SEM** | **IFEP Reliability** | **IFEP SEM** | **English Learner Reliability** | **English Learner SEM** | **RFEP Reliability** | **RFEP SEM** |
| Claim 1 | **14–17** | **14–17** | 0.74 | 0.63 | 0.53 | 0.74 | 0.74 | 0.63 | 0.72 | 0.60 | 0.32 | 0.75 | 0.71 | 0.62 |
| Claim 2 | **8** | **9** | 0.66 | 0.68 | 0.61 | 0.71 | 0.68 | 0.69 | 0.60 | 0.69 | 0.54 | 0.70 | 0.62 | 0.68 |
| Claim 3 | **8–9** | **8–9** | 0.44 | 0.89 | 0.40 | 0.92 | 0.46 | 0.90 | 0.34 | 0.90 | 0.26 | 0.91 | 0.38 | 0.89 |
| Claim 4 | **9** | **9** | 0.68 | 0.72 | 0.55 | 0.78 | 0.69 | 0.72 | 0.63 | 0.70 | 0.44 | 0.78 | 0.65 | 0.72 |

Table 8.D. Claim Reliabilities and SEM by Special Education Services Status and English Fluency for Grade Eleven—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **No Special Education Services Reliability** | **No Special Education Services SEM** | **With Special Education Services Reliability** | **With Special Education Services SEM** | **English Only Reliability** | **English Only SEM** | **IFEP Reliability** | **IFEP SEM** | **English Learner Reliability** | **English Learner SEM** | **RFEP Reliability** | **RFEP SEM** |
| Claim 1 | **15–16** | **15–16** | 0.74 | 0.66 | 0.61 | 0.74 | 0.75 | 0.66 | 0.72 | 0.64 | 0.39 | 0.75 | 0.71 | 0.65 |
| Claim 2 | **8** | **9** | 0.68 | 0.75 | 0.54 | 0.84 | 0.69 | 0.76 | 0.64 | 0.74 | 0.44 | 0.85 | 0.65 | 0.75 |
| Claim 3 | **8–9** | **8–9** | 0.42 | 1.02 | 0.30 | 1.07 | 0.43 | 1.02 | 0.36 | 1.01 | 0.08 | 1.09 | 0.39 | 1.01 |
| Claim 4 | **9** | **9** | 0.64 | 0.81 | 0.53 | 0.87 | 0.65 | 0.82 | 0.59 | 0.79 | 0.42 | 0.87 | 0.61 | 0.81 |

Table 8.D. Claim Reliabilities and SEM by Special Education Services Status and English Fluency for Grade Three—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **No Special Education Services Reliability** | **No Special Education Services SEM** | **With Special Education Services Reliability** | **With Special Education Services SEM** | **English Only Reliability** | **English Only SEM** | **IFEP Reliability** | **IFEP SEM** | **English Learner Reliability** | **English Learner SEM** | **RFEP Reliability** | **RFEP SEM** |
| Claim 1 | **17–20** | **17–20** | 0.89 | 0.34 | 0.90 | 0.36 | 0.90 | 0.34 | 0.87 | 0.34 | 0.88 | 0.35 | 0.86 | 0.34 |
| Claim 2 | **8–10** | **8** | 0.72 | 0.53 | 0.64 | 0.63 | 0.73 | 0.53 | 0.73 | 0.48 | 0.57 | 0.61 | 0.70 | 0.49 |
| Claim 3 | **8–10** | **8** | 0.74 | 0.54 | 0.66 | 0.65 | 0.75 | 0.55 | 0.75 | 0.49 | 0.61 | 0.62 | 0.71 | 0.50 |

Table 8.D. Claim Reliabilities and SEM by Special Education Services Status and English Fluency for Grade Four—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **No Special Education Services Reliability** | **No Special Education Services SEM** | **With Special Education Services Reliability** | **With Special Education Services SEM** | **English Only Reliability** | **English Only SEM** | **IFEP Reliability** | **IFEP SEM** | **English Learner Reliability** | **English Learner SEM** | **RFEP Reliability** | **RFEP SEM** |
| Claim 1 | **17–20** | **17–20** | 0.89 | 0.34 | 0.89 | 0.38 | 0.90 | 0.34 | 0.88 | 0.33 | 0.86 | 0.36 | 0.86 | 0.33 |
| Claim 2 | **8–10** | **8** | 0.74 | 0.53 | 0.68 | 0.60 | 0.75 | 0.53 | 0.72 | 0.51 | 0.60 | 0.59 | 0.69 | 0.51 |
| Claim 3 | **8–10** | **8** | 0.73 | 0.56 | 0.58 | 0.71 | 0.74 | 0.57 | 0.75 | 0.51 | 0.54 | 0.66 | 0.71 | 0.51 |

Table 8.D. Claim Reliabilities and SEM by Special Education Services Status and English Fluency for Grade Five—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **No Special Education Services Reliability** | **No Special Education Services SEM** | **With Special Education Services Reliability** | **With Special Education Services SEM** | **English Only Reliability** | **English Only SEM** | **IFEP Reliability** | **IFEP SEM** | **English Learner Reliability** | **English Learner SEM** | **RFEP Reliability** | **RFEP SEM** |
| Claim 1 | **17–20** | **17–20** | 0.88 | 0.39 | 0.85 | 0.46 | 0.89 | 0.40 | 0.88 | 0.37 | 0.81 | 0.45 | 0.86 | 0.38 |
| Claim 2 | **8–10** | **8** | 0.69 | 0.59 | 0.52 | 0.71 | 0.70 | 0.58 | 0.73 | 0.53 | 0.33 | 0.71 | 0.67 | 0.56 |
| Claim 3 | **8–10** | **8** | 0.68 | 0.68 | 0.49 | 0.83 | 0.70 | 0.68 | 0.72 | 0.61 | 0.38 | 0.81 | 0.66 | 0.64 |

Table 8.D. Claim Reliabilities and SEM by Special Education Services Status and English Fluency for Grade Six—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **No Special Education Services Reliability** | **No Special Education Services SEM** | **With Special Education Services Reliability** | **With Special Education Services SEM** | **English Only Reliability** | **English Only SEM** | **IFEP Reliability** | **IFEP SEM** | **English Learner Reliability** | **English Learner SEM** | **RFEP Reliability** | **RFEP SEM** |
| Claim 1 | **16–20** | **16–20** | 0.88 | 0.44 | 0.82 | 0.55 | 0.89 | 0.45 | 0.88 | 0.42 | 0.80 | 0.52 | 0.86 | 0.43 |
| Claim 2 | **8–10** | **8** | 0.72 | 0.64 | 0.51 | 0.84 | 0.73 | 0.64 | 0.76 | 0.57 | 0.39 | 0.81 | 0.70 | 0.61 |
| Claim 3 | **8–10** | **8** | 0.71 | 0.70 | 0.44 | 0.88 | 0.72 | 0.71 | 0.75 | 0.63 | 0.35 | 0.85 | 0.68 | 0.68 |

Table 8.D. Claim Reliabilities and SEM by Special Education Services Status and English Fluency for Grade Seven—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **No Special Education Services Reliability** | **No Special Education Services SEM** | **With Special Education Services Reliability** | **With Special Education Services SEM** | **English Only Reliability** | **English Only SEM** | **IFEP Reliability** | **IFEP SEM** | **English Learner Reliability** | **English Learner SEM** | **RFEP Reliability** | **RFEP SEM** |
| Claim 1 | **16–20** | **16–20** | 0.89 | 0.45 | 0.81 | 0.56 | 0.90 | 0.46 | 0.90 | 0.42 | 0.78 | 0.55 | 0.88 | 0.45 |
| Claim 2 | **8–10** | **8** | 0.68 | 0.76 | 0.33 | 0.96 | 0.70 | 0.75 | 0.75 | 0.67 | 0.18 | 0.96 | 0.65 | 0.75 |
| Claim 3 | **8–10** | **8** | 0.63 | 0.87 | 0.27 | 1.06 | 0.64 | 0.87 | 0.69 | 0.77 | 0.18 | 1.06 | 0.59 | 0.87 |

Table 8.D. Claim Reliabilities and SEM by Special Education Services Status and English Fluency for Grade Eight—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **No Special Education Services Reliability** | **No Special Education Services SEM** | **With Special Education Services Reliability** | **With Special Education Services SEM** | **English Only Reliability** | **English Only SEM** | **IFEP Reliability** | **IFEP SEM** | **English Learner Reliability** | **English Learner SEM** | **RFEP Reliability** | **RFEP SEM** |
| Claim 1 | **16–20** | **16–20** | 0.88 | 0.52 | 0.79 | 0.61 | 0.89 | 0.52 | 0.89 | 0.49 | 0.76 | 0.61 | 0.87 | 0.52 |
| Claim 2 | **8–10** | **8** | 0.73 | 0.76 | 0.40 | 0.96 | 0.74 | 0.76 | 0.79 | 0.67 | 0.26 | 0.97 | 0.70 | 0.77 |
| Claim 3 | **8–10** | **8** | 0.65 | 0.88 | 0.31 | 1.04 | 0.67 | 0.88 | 0.71 | 0.80 | 0.22 | 1.06 | 0.62 | 0.88 |

Table 8.D. Claim Reliabilities and SEM by Special Education Services Status and English Fluency for Grade Eleven—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **No Special Education Services Reliability** | **No Special Education Services SEM** | **With Special Education Services Reliability** | **With Special Education Services SEM** | **English Only Reliability** | **English Only SEM** | **IFEP Reliability** | **IFEP SEM** | **English Learner Reliability** | **English Learner SEM** | **RFEP Reliability** | **RFEP SEM** |
| Claim 1 | **19–22** | **19–22** | 0.89 | 0.52 | 0.70 | 0.67 | 0.89 | 0.52 | 0.91 | 0.47 | 0.69 | 0.69 | 0.88 | 0.52 |
| Claim 2 | **8–10** | **8** | 0.58 | 1.02 | N/A | 1.39 | 0.59 | 1.02 | 0.68 | 0.90 | N/A | 1.38 | 0.52 | 1.04 |
| Claim 3 | **8–10** | **8** | 0.56 | 1.07 | N/A | 1.31 | 0.58 | 1.06 | 0.65 | 0.96 | N/A | 1.33 | 0.51 | 1.08 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Grade Three—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **14–16** | **14–16** | 0.71 | 0.56 | 0.73 | 0.54 | 0.70 | 0.55 | 0.71 | 0.53 | 0.71 | 0.56 | 0.70 | 0.57 | 0.73 | 0.54 |
| Claim 2 | **8** | **9** | 0.68 | 0.65 | 0.68 | 0.63 | 0.69 | 0.64 | 0.67 | 0.63 | 0.68 | 0.64 | 0.68 | 0.65 | 0.68 | 0.63 |
| Claim 3 | **8–9** | **8–9** | 0.50 | 0.86 | 0.49 | 0.78 | 0.46 | 0.84 | 0.47 | 0.78 | 0.49 | 0.84 | 0.48 | 0.87 | 0.49 | 0.79 |
| Claim 4 | **9** | **9** | 0.69 | 0.68 | 0.69 | 0.64 | 0.67 | 0.69 | 0.67 | 0.65 | 0.67 | 0.68 | 0.67 | 0.70 | 0.69 | 0.66 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Grade Four—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **14–16** | **14–16** | 0.72 | 0.59 | 0.73 | 0.55 | 0.72 | 0.58 | 0.71 | 0.55 | 0.72 | 0.58 | 0.72 | 0.60 | 0.74 | 0.56 |
| Claim 2 | **8** | **9** | 0.67 | 0.70 | 0.65 | 0.70 | 0.68 | 0.69 | 0.63 | 0.70 | 0.67 | 0.69 | 0.68 | 0.70 | 0.65 | 0.70 |
| Claim 3 | **8–9** | **8–9** | 0.49 | 0.92 | 0.46 | 0.88 | 0.51 | 0.91 | 0.43 | 0.88 | 0.49 | 0.91 | 0.49 | 0.93 | 0.46 | 0.88 |
| Claim 4 | **9** | **9** | 0.67 | 0.73 | 0.65 | 0.71 | 0.67 | 0.73 | 0.64 | 0.71 | 0.67 | 0.72 | 0.68 | 0.74 | 0.66 | 0.72 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Grade Five—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **14–16** | **14–16** | 0.73 | 0.58 | 0.68 | 0.60 | 0.72 | 0.57 | 0.69 | 0.58 | 0.72 | 0.58 | 0.72 | 0.59 | 0.71 | 0.59 |
| Claim 2 | **8** | **9** | 0.71 | 0.69 | 0.64 | 0.71 | 0.70 | 0.69 | 0.63 | 0.71 | 0.70 | 0.68 | 0.71 | 0.69 | 0.67 | 0.70 |
| Claim 3 | **8–9** | **8–9** | 0.50 | 0.89 | 0.47 | 0.88 | 0.50 | 0.89 | 0.45 | 0.88 | 0.50 | 0.89 | 0.51 | 0.89 | 0.47 | 0.88 |
| Claim 4 | **9** | **9** | 0.74 | 0.64 | 0.69 | 0.63 | 0.74 | 0.63 | 0.69 | 0.62 | 0.73 | 0.63 | 0.73 | 0.64 | 0.72 | 0.63 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Grade Six—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **14–17** | **14–17** | 0.72 | 0.64 | 0.73 | 0.59 | 0.72 | 0.63 | 0.72 | 0.59 | 0.71 | 0.64 | 0.70 | 0.66 | 0.74 | 0.59 |
| Claim 2 | **8** | **9** | 0.72 | 0.64 | 0.64 | 0.64 | 0.70 | 0.63 | 0.63 | 0.64 | 0.71 | 0.63 | 0.72 | 0.64 | 0.68 | 0.63 |
| Claim 3 | **8–9** | **8–9** | 0.50 | 0.89 | 0.37 | 0.93 | 0.49 | 0.89 | 0.36 | 0.91 | 0.50 | 0.89 | 0.53 | 0.90 | 0.41 | 0.91 |
| Claim 4 | **9** | **9** | 0.68 | 0.74 | 0.64 | 0.70 | 0.68 | 0.74 | 0.62 | 0.71 | 0.68 | 0.74 | 0.69 | 0.75 | 0.66 | 0.72 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Grade Seven—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **14–17** | **14–17** | 0.74 | 0.62 | 0.72 | 0.60 | 0.74 | 0.61 | 0.71 | 0.59 | 0.73 | 0.61 | 0.72 | 0.63 | 0.74 | 0.60 |
| Claim 2 | **8** | **9** | 0.71 | 0.71 | 0.62 | 0.67 | 0.69 | 0.68 | 0.61 | 0.67 | 0.69 | 0.68 | 0.70 | 0.71 | 0.67 | 0.66 |
| Claim 3 | **8–9** | **8–9** | 0.49 | 0.95 | 0.33 | 0.97 | 0.42 | 0.93 | 0.30 | 0.96 | 0.45 | 0.94 | 0.47 | 0.94 | 0.36 | 0.96 |
| Claim 4 | **9** | **9** | 0.70 | 0.77 | 0.62 | 0.72 | 0.68 | 0.76 | 0.60 | 0.73 | 0.68 | 0.76 | 0.69 | 0.77 | 0.66 | 0.74 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Grade Eight—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **14–17** | **14–17** | 0.71 | 0.67 | 0.73 | 0.60 | 0.72 | 0.66 | 0.72 | 0.61 | 0.70 | 0.66 | 0.69 | 0.68 | 0.74 | 0.62 |
| Claim 2 | **8** | **9** | 0.70 | 0.69 | 0.60 | 0.70 | 0.67 | 0.68 | 0.59 | 0.69 | 0.67 | 0.68 | 0.69 | 0.69 | 0.65 | 0.69 |
| Claim 3 | **8–9** | **8–9** | 0.48 | 0.90 | 0.37 | 0.90 | 0.48 | 0.90 | 0.36 | 0.90 | 0.46 | 0.90 | 0.48 | 0.90 | 0.42 | 0.90 |
| Claim 4 | **9** | **9** | 0.66 | 0.74 | 0.64 | 0.70 | 0.67 | 0.73 | 0.63 | 0.70 | 0.67 | 0.74 | 0.66 | 0.76 | 0.67 | 0.71 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Grade Eleven—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **15–16** | **15–16** | 0.74 | 0.67 | 0.73 | 0.65 | 0.72 | 0.67 | 0.70 | 0.64 | 0.73 | 0.67 | 0.73 | 0.69 | 0.74 | 0.65 |
| Claim 2 | **8** | **9** | 0.68 | 0.78 | 0.64 | 0.75 | 0.69 | 0.77 | 0.61 | 0.74 | 0.68 | 0.77 | 0.68 | 0.79 | 0.68 | 0.75 |
| Claim 3 | **8–9** | **8–9** | 0.43 | 1.03 | 0.39 | 1.01 | 0.43 | 1.03 | 0.36 | 1.01 | 0.42 | 1.03 | 0.43 | 1.04 | 0.41 | 1.01 |
| Claim 4 | **9** | **9** | 0.64 | 0.84 | 0.59 | 0.79 | 0.63 | 0.83 | 0.57 | 0.80 | 0.64 | 0.83 | 0.64 | 0.84 | 0.64 | 0.81 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Grade Three—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **17–20** | **17–20** | 0.89 | 0.34 | 0.88 | 0.34 | 0.88 | 0.34 | 0.87 | 0.34 | 0.89 | 0.34 | 0.89 | 0.35 | 0.89 | 0.34 |
| Claim 2 | **8–10** | **8** | 0.67 | 0.57 | 0.75 | 0.49 | 0.68 | 0.55 | 0.72 | 0.50 | 0.67 | 0.56 | 0.63 | 0.60 | 0.73 | 0.51 |
| Claim 3 | **8–10** | **8** | 0.69 | 0.59 | 0.77 | 0.50 | 0.71 | 0.57 | 0.74 | 0.51 | 0.70 | 0.58 | 0.66 | 0.61 | 0.75 | 0.52 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Grade Four—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **17–20** | **17–20** | 0.89 | 0.35 | 0.88 | 0.33 | 0.89 | 0.34 | 0.88 | 0.33 | 0.88 | 0.35 | 0.89 | 0.36 | 0.89 | 0.33 |
| Claim 2 | **8–10** | **8** | 0.70 | 0.56 | 0.74 | 0.51 | 0.70 | 0.54 | 0.73 | 0.51 | 0.70 | 0.55 | 0.68 | 0.57 | 0.74 | 0.52 |
| Claim 3 | **8–10** | **8** | 0.66 | 0.63 | 0.75 | 0.51 | 0.68 | 0.59 | 0.74 | 0.52 | 0.67 | 0.61 | 0.63 | 0.65 | 0.74 | 0.54 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Grade Five—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **17–20** | **17–20** | 0.88 | 0.42 | 0.89 | 0.37 | 0.87 | 0.41 | 0.88 | 0.38 | 0.87 | 0.42 | 0.86 | 0.43 | 0.89 | 0.38 |
| Claim 2 | **8–10** | **8** | 0.62 | 0.64 | 0.74 | 0.52 | 0.61 | 0.61 | 0.71 | 0.54 | 0.60 | 0.63 | 0.55 | 0.66 | 0.71 | 0.55 |
| Claim 3 | **8–10** | **8** | 0.63 | 0.74 | 0.72 | 0.60 | 0.64 | 0.72 | 0.70 | 0.63 | 0.61 | 0.73 | 0.56 | 0.77 | 0.71 | 0.65 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Grade Six—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **16–20** | **16–20** | 0.87 | 0.48 | 0.88 | 0.42 | 0.88 | 0.46 | 0.87 | 0.42 | 0.87 | 0.47 | 0.86 | 0.49 | 0.88 | 0.43 |
| Claim 2 | **8–10** | **8** | 0.65 | 0.70 | 0.76 | 0.56 | 0.66 | 0.67 | 0.74 | 0.58 | 0.64 | 0.69 | 0.60 | 0.74 | 0.74 | 0.60 |
| Claim 3 | **8–10** | **8** | 0.64 | 0.78 | 0.75 | 0.62 | 0.66 | 0.74 | 0.72 | 0.64 | 0.63 | 0.76 | 0.60 | 0.80 | 0.73 | 0.67 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Grade Seven—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **16–20** | **16–20** | 0.88 | 0.49 | 0.90 | 0.42 | 0.88 | 0.46 | 0.89 | 0.42 | 0.87 | 0.49 | 0.86 | 0.50 | 0.89 | 0.44 |
| Claim 2 | **8–10** | **8** | 0.58 | 0.83 | 0.76 | 0.64 | 0.61 | 0.81 | 0.72 | 0.68 | 0.57 | 0.83 | 0.49 | 0.87 | 0.71 | 0.70 |
| Claim 3 | **8–10** | **8** | 0.52 | 0.95 | 0.71 | 0.74 | 0.55 | 0.91 | 0.65 | 0.79 | 0.51 | 0.94 | 0.46 | 0.98 | 0.65 | 0.83 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Grade Eight—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **16–20** | **16–20** | 0.86 | 0.55 | 0.89 | 0.48 | 0.87 | 0.54 | 0.88 | 0.49 | 0.85 | 0.55 | 0.84 | 0.57 | 0.88 | 0.50 |
| Claim 2 | **8–10** | **8** | 0.65 | 0.84 | 0.80 | 0.64 | 0.69 | 0.81 | 0.75 | 0.69 | 0.64 | 0.83 | 0.57 | 0.88 | 0.75 | 0.71 |
| Claim 3 | **8–10** | **8** | 0.57 | 0.94 | 0.72 | 0.76 | 0.60 | 0.91 | 0.67 | 0.81 | 0.56 | 0.94 | 0.51 | 0.97 | 0.68 | 0.84 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Grade Eleven—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **19–22** | **19–22** | 0.85 | 0.56 | 0.91 | 0.45 | 0.87 | 0.53 | 0.89 | 0.47 | 0.85 | 0.56 | 0.83 | 0.59 | 0.90 | 0.49 |
| Claim 2 | **8–10** | **8** | 0.42 | 1.13 | 0.72 | 0.82 | 0.45 | 1.10 | 0.61 | 0.92 | 0.39 | 1.13 | 0.26 | 1.23 | 0.63 | 0.95 |
| Claim 3 | **8–10** | **8** | 0.40 | 1.16 | 0.68 | 0.89 | 0.46 | 1.12 | 0.59 | 0.97 | 0.39 | 1.15 | 0.30 | 1.20 | 0.61 | 1.01 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Not Economically Disadvantaged for Grade Three—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **14–16** | **14–16** | 0.74 | 0.55 | 0.67 | 0.54 | 0.72 | 0.55 | 0.69 | 0.53 | 0.73 | 0.54 | 0.73 | 0.55 | 0.70 | 0.53 |
| Claim 2 | **8** | **9** | 0.70 | 0.63 | 0.62 | 0.63 | 0.70 | 0.63 | 0.64 | 0.63 | 0.68 | 0.63 | 0.70 | 0.64 | 0.65 | 0.63 |
| Claim 3 | **8–9** | **8–9** | 0.52 | 0.83 | 0.41 | 0.77 | 0.45 | 0.80 | 0.44 | 0.77 | 0.50 | 0.80 | 0.52 | 0.83 | 0.45 | 0.78 |
| Claim 4 | **9** | **9** | 0.71 | 0.66 | 0.64 | 0.63 | 0.68 | 0.69 | 0.65 | 0.64 | 0.68 | 0.66 | 0.70 | 0.68 | 0.66 | 0.65 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Not Economically Disadvantaged for Grade Four—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **14–16** | **14–16** | 0.74 | 0.56 | 0.67 | 0.55 | 0.74 | 0.57 | 0.70 | 0.55 | 0.73 | 0.56 | 0.74 | 0.58 | 0.70 | 0.55 |
| Claim 2 | **8** | **9** | 0.66 | 0.69 | 0.57 | 0.71 | 0.68 | 0.70 | 0.61 | 0.70 | 0.66 | 0.69 | 0.68 | 0.70 | 0.61 | 0.69 |
| Claim 3 | **8–9** | **8–9** | 0.49 | 0.90 | 0.36 | 0.87 | 0.50 | 0.90 | 0.40 | 0.87 | 0.46 | 0.89 | 0.48 | 0.90 | 0.39 | 0.87 |
| Claim 4 | **9** | **9** | 0.65 | 0.72 | 0.58 | 0.70 | 0.67 | 0.72 | 0.62 | 0.71 | 0.66 | 0.72 | 0.68 | 0.73 | 0.63 | 0.72 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Not Economically Disadvantaged for Grade Five—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **14–16** | **14–16** | 0.72 | 0.57 | 0.59 | 0.61 | 0.71 | 0.57 | 0.65 | 0.58 | 0.72 | 0.58 | 0.73 | 0.58 | 0.66 | 0.59 |
| Claim 2 | **8** | **9** | 0.69 | 0.68 | 0.55 | 0.72 | 0.66 | 0.68 | 0.59 | 0.71 | 0.67 | 0.69 | 0.69 | 0.69 | 0.62 | 0.70 |
| Claim 3 | **8–9** | **8–9** | 0.48 | 0.88 | 0.38 | 0.88 | 0.50 | 0.90 | 0.43 | 0.88 | 0.48 | 0.88 | 0.52 | 0.89 | 0.41 | 0.88 |
| Claim 4 | **9** | **9** | 0.73 | 0.63 | 0.61 | 0.64 | 0.72 | 0.63 | 0.66 | 0.62 | 0.72 | 0.63 | 0.74 | 0.63 | 0.68 | 0.63 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Not Economically Disadvantaged for Grade Six—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **14–17** | **14–17** | 0.74 | 0.61 | 0.68 | 0.58 | 0.73 | 0.61 | 0.70 | 0.58 | 0.73 | 0.60 | 0.74 | 0.62 | 0.72 | 0.58 |
| Claim 2 | **8** | **9** | 0.71 | 0.62 | 0.54 | 0.65 | 0.69 | 0.62 | 0.58 | 0.64 | 0.68 | 0.63 | 0.71 | 0.63 | 0.63 | 0.63 |
| Claim 3 | **8–9** | **8–9** | 0.45 | 0.89 | 0.20 | 0.95 | 0.46 | 0.90 | 0.30 | 0.92 | 0.45 | 0.90 | 0.51 | 0.90 | 0.31 | 0.92 |
| Claim 4 | **9** | **9** | 0.68 | 0.73 | 0.55 | 0.69 | 0.67 | 0.72 | 0.59 | 0.71 | 0.66 | 0.72 | 0.69 | 0.74 | 0.62 | 0.71 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Not Economically Disadvantaged for Grade Seven—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **14–17** | **14–17** | 0.74 | 0.60 | 0.65 | 0.60 | 0.73 | 0.60 | 0.69 | 0.59 | 0.74 | 0.60 | 0.75 | 0.61 | 0.71 | 0.60 |
| Claim 2 | **8** | **9** | 0.70 | 0.67 | 0.51 | 0.67 | 0.63 | 0.66 | 0.54 | 0.67 | 0.67 | 0.67 | 0.70 | 0.68 | 0.62 | 0.66 |
| Claim 3 | **8–9** | **8–9** | 0.47 | 0.95 | 0.17 | 0.98 | 0.35 | 0.95 | 0.25 | 0.97 | 0.40 | 0.95 | 0.45 | 0.95 | 0.27 | 0.97 |
| Claim 4 | **9** | **9** | 0.69 | 0.76 | 0.51 | 0.71 | 0.64 | 0.75 | 0.56 | 0.73 | 0.66 | 0.75 | 0.69 | 0.76 | 0.61 | 0.73 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Not Economically Disadvantaged for Grade Eight—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **14–17** | **14–17** | 0.74 | 0.65 | 0.68 | 0.59 | 0.75 | 0.64 | 0.71 | 0.60 | 0.73 | 0.63 | 0.73 | 0.64 | 0.72 | 0.60 |
| Claim 2 | **8** | **9** | 0.69 | 0.69 | 0.49 | 0.71 | 0.65 | 0.67 | 0.54 | 0.69 | 0.66 | 0.68 | 0.69 | 0.69 | 0.60 | 0.69 |
| Claim 3 | **8–9** | **8–9** | 0.47 | 0.89 | 0.25 | 0.91 | 0.48 | 0.90 | 0.30 | 0.90 | 0.44 | 0.89 | 0.48 | 0.90 | 0.35 | 0.90 |
| Claim 4 | **9** | **9** | 0.68 | 0.71 | 0.56 | 0.69 | 0.68 | 0.72 | 0.60 | 0.70 | 0.67 | 0.72 | 0.68 | 0.73 | 0.64 | 0.70 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Not Economically Disadvantaged for Grade Eleven—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **15–16** | **15–16** | 0.75 | 0.66 | 0.69 | 0.65 | 0.73 | 0.65 | 0.68 | 0.63 | 0.74 | 0.66 | 0.75 | 0.67 | 0.72 | 0.65 |
| Claim 2 | **8** | **9** | 0.67 | 0.75 | 0.58 | 0.75 | 0.69 | 0.75 | 0.58 | 0.74 | 0.68 | 0.76 | 0.70 | 0.78 | 0.65 | 0.75 |
| Claim 3 | **8–9** | **8–9** | 0.43 | 1.02 | 0.30 | 1.01 | 0.44 | 1.02 | 0.32 | 1.00 | 0.42 | 1.02 | 0.44 | 1.03 | 0.37 | 1.01 |
| Claim 4 | **9** | **9** | 0.65 | 0.83 | 0.52 | 0.79 | 0.62 | 0.81 | 0.54 | 0.79 | 0.64 | 0.82 | 0.65 | 0.83 | 0.61 | 0.80 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Not Economically Disadvantaged for Grade Three—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **17–20** | **17–20** | 0.89 | 0.34 | 0.84 | 0.35 | 0.88 | 0.34 | 0.86 | 0.34 | 0.88 | 0.34 | 0.89 | 0.34 | 0.87 | 0.34 |
| Claim 2 | **8–10** | **8** | 0.71 | 0.53 | 0.71 | 0.47 | 0.72 | 0.52 | 0.71 | 0.48 | 0.71 | 0.52 | 0.70 | 0.54 | 0.72 | 0.49 |
| Claim 3 | **8–10** | **8** | 0.73 | 0.54 | 0.74 | 0.48 | 0.74 | 0.53 | 0.74 | 0.49 | 0.73 | 0.54 | 0.72 | 0.56 | 0.75 | 0.50 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Not Economically Disadvantaged for Grade Four—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **17–20** | **17–20** | 0.89 | 0.34 | 0.85 | 0.33 | 0.88 | 0.33 | 0.87 | 0.33 | 0.89 | 0.34 | 0.89 | 0.34 | 0.88 | 0.33 |
| Claim 2 | **8–10** | **8** | 0.73 | 0.53 | 0.68 | 0.51 | 0.71 | 0.52 | 0.71 | 0.51 | 0.73 | 0.53 | 0.72 | 0.54 | 0.72 | 0.51 |
| Claim 3 | **8–10** | **8** | 0.72 | 0.58 | 0.71 | 0.49 | 0.72 | 0.55 | 0.73 | 0.51 | 0.72 | 0.56 | 0.71 | 0.60 | 0.74 | 0.52 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Not Economically Disadvantaged for Grade Five—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **17–20** | **17–20** | 0.89 | 0.40 | 0.86 | 0.36 | 0.87 | 0.38 | 0.87 | 0.37 | 0.88 | 0.39 | 0.88 | 0.40 | 0.88 | 0.37 |
| Claim 2 | **8–10** | **8** | 0.70 | 0.59 | 0.71 | 0.50 | 0.67 | 0.58 | 0.71 | 0.53 | 0.68 | 0.58 | 0.66 | 0.60 | 0.71 | 0.53 |
| Claim 3 | **8–10** | **8** | 0.69 | 0.69 | 0.68 | 0.58 | 0.69 | 0.66 | 0.69 | 0.61 | 0.67 | 0.68 | 0.65 | 0.70 | 0.70 | 0.62 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Not Economically Disadvantaged for Grade Six—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **16–20** | **16–20** | 0.88 | 0.44 | 0.84 | 0.41 | 0.88 | 0.44 | 0.86 | 0.41 | 0.87 | 0.44 | 0.88 | 0.46 | 0.87 | 0.42 |
| Claim 2 | **8–10** | **8** | 0.71 | 0.64 | 0.73 | 0.54 | 0.70 | 0.63 | 0.74 | 0.57 | 0.70 | 0.63 | 0.68 | 0.67 | 0.74 | 0.57 |
| Claim 3 | **8–10** | **8** | 0.70 | 0.72 | 0.71 | 0.59 | 0.70 | 0.70 | 0.72 | 0.63 | 0.69 | 0.70 | 0.68 | 0.74 | 0.72 | 0.64 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Not Economically Disadvantaged for Grade Seven—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **16–20** | **16–20** | 0.89 | 0.46 | 0.87 | 0.41 | 0.89 | 0.43 | 0.88 | 0.42 | 0.88 | 0.45 | 0.88 | 0.47 | 0.88 | 0.42 |
| Claim 2 | **8–10** | **8** | 0.65 | 0.76 | 0.73 | 0.60 | 0.68 | 0.72 | 0.72 | 0.65 | 0.66 | 0.76 | 0.61 | 0.80 | 0.71 | 0.66 |
| Claim 3 | **8–10** | **8** | 0.60 | 0.88 | 0.68 | 0.70 | 0.63 | 0.82 | 0.65 | 0.76 | 0.60 | 0.88 | 0.56 | 0.91 | 0.65 | 0.79 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Not Economically Disadvantaged for Grade Eight—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **16–20** | **16–20** | 0.87 | 0.52 | 0.87 | 0.46 | 0.88 | 0.52 | 0.87 | 0.48 | 0.87 | 0.52 | 0.87 | 0.54 | 0.88 | 0.49 |
| Claim 2 | **8–10** | **8** | 0.72 | 0.76 | 0.78 | 0.59 | 0.74 | 0.75 | 0.76 | 0.66 | 0.71 | 0.77 | 0.67 | 0.81 | 0.75 | 0.67 |
| Claim 3 | **8–10** | **8** | 0.64 | 0.89 | 0.70 | 0.71 | 0.67 | 0.87 | 0.68 | 0.78 | 0.63 | 0.89 | 0.61 | 0.91 | 0.68 | 0.80 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Not Economically Disadvantaged for Grade Eleven—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **19–22** | **19–22** | 0.86 | 0.53 | 0.91 | 0.43 | 0.88 | 0.50 | 0.89 | 0.46 | 0.87 | 0.53 | 0.86 | 0.55 | 0.90 | 0.47 |
| Claim 2 | **8–10** | **8** | 0.53 | 1.04 | 0.72 | 0.75 | 0.54 | 1.02 | 0.63 | 0.88 | 0.51 | 1.06 | 0.42 | 1.13 | 0.65 | 0.90 |
| Claim 3 | **8–10** | **8** | 0.49 | 1.10 | 0.68 | 0.82 | 0.53 | 1.06 | 0.61 | 0.94 | 0.50 | 1.10 | 0.44 | 1.14 | 0.63 | 0.96 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Economically Disadvantaged for Grade Three—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **14–16** | **14–16** | 0.67 | 0.57 | 0.74 | 0.55 | 0.68 | 0.56 | 0.72 | 0.53 | 0.69 | 0.56 | 0.67 | 0.58 | 0.72 | 0.55 |
| Claim 2 | **8** | **9** | 0.65 | 0.65 | 0.70 | 0.63 | 0.67 | 0.65 | 0.69 | 0.63 | 0.67 | 0.64 | 0.66 | 0.66 | 0.68 | 0.64 |
| Claim 3 | **8–9** | **8–9** | 0.47 | 0.87 | 0.50 | 0.81 | 0.43 | 0.86 | 0.48 | 0.80 | 0.47 | 0.85 | 0.45 | 0.89 | 0.50 | 0.83 |
| Claim 4 | **9** | **9** | 0.65 | 0.69 | 0.70 | 0.67 | 0.65 | 0.70 | 0.68 | 0.66 | 0.66 | 0.68 | 0.64 | 0.71 | 0.68 | 0.68 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Economically Disadvantaged for Grade Four—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **14–16** | **14–16** | 0.69 | 0.60 | 0.75 | 0.56 | 0.69 | 0.59 | 0.72 | 0.56 | 0.70 | 0.59 | 0.69 | 0.61 | 0.73 | 0.58 |
| Claim 2 | **8** | **9** | 0.66 | 0.70 | 0.68 | 0.70 | 0.67 | 0.68 | 0.66 | 0.69 | 0.67 | 0.69 | 0.67 | 0.70 | 0.67 | 0.70 |
| Claim 3 | **8–9** | **8–9** | 0.47 | 0.93 | 0.50 | 0.89 | 0.48 | 0.92 | 0.44 | 0.89 | 0.48 | 0.92 | 0.48 | 0.94 | 0.49 | 0.90 |
| Claim 4 | **9** | **9** | 0.65 | 0.74 | 0.68 | 0.71 | 0.65 | 0.74 | 0.65 | 0.72 | 0.66 | 0.73 | 0.66 | 0.74 | 0.67 | 0.73 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Economically Disadvantaged for Grade Five—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **14–16** | **14–16** | 0.72 | 0.59 | 0.73 | 0.59 | 0.70 | 0.58 | 0.71 | 0.57 | 0.71 | 0.58 | 0.70 | 0.60 | 0.73 | 0.58 |
| Claim 2 | **8** | **9** | 0.71 | 0.69 | 0.69 | 0.70 | 0.70 | 0.69 | 0.67 | 0.70 | 0.69 | 0.68 | 0.71 | 0.68 | 0.70 | 0.69 |
| Claim 3 | **8–9** | **8–9** | 0.48 | 0.89 | 0.51 | 0.88 | 0.48 | 0.89 | 0.47 | 0.88 | 0.49 | 0.89 | 0.50 | 0.90 | 0.50 | 0.89 |
| Claim 4 | **9** | **9** | 0.73 | 0.64 | 0.73 | 0.63 | 0.73 | 0.63 | 0.71 | 0.62 | 0.73 | 0.63 | 0.71 | 0.64 | 0.73 | 0.63 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Economically Disadvantaged for Grade Six—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **14–17** | **14–17** | 0.68 | 0.65 | 0.75 | 0.60 | 0.70 | 0.64 | 0.74 | 0.60 | 0.70 | 0.64 | 0.67 | 0.67 | 0.73 | 0.62 |
| Claim 2 | **8** | **9** | 0.69 | 0.65 | 0.70 | 0.64 | 0.70 | 0.64 | 0.68 | 0.64 | 0.70 | 0.63 | 0.71 | 0.65 | 0.71 | 0.63 |
| Claim 3 | **8–9** | **8–9** | 0.49 | 0.89 | 0.48 | 0.91 | 0.49 | 0.89 | 0.44 | 0.90 | 0.50 | 0.89 | 0.52 | 0.90 | 0.49 | 0.90 |
| Claim 4 | **9** | **9** | 0.66 | 0.74 | 0.68 | 0.72 | 0.68 | 0.75 | 0.66 | 0.72 | 0.67 | 0.74 | 0.67 | 0.75 | 0.68 | 0.74 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Economically Disadvantaged for Grade Seven—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **14–17** | **14–17** | 0.72 | 0.63 | 0.75 | 0.60 | 0.71 | 0.62 | 0.72 | 0.59 | 0.71 | 0.62 | 0.69 | 0.63 | 0.74 | 0.61 |
| Claim 2 | **8** | **9** | 0.70 | 0.72 | 0.69 | 0.67 | 0.69 | 0.68 | 0.66 | 0.67 | 0.68 | 0.69 | 0.68 | 0.72 | 0.70 | 0.68 |
| Claim 3 | **8–9** | **8–9** | 0.48 | 0.94 | 0.42 | 0.96 | 0.41 | 0.92 | 0.35 | 0.95 | 0.44 | 0.93 | 0.46 | 0.93 | 0.43 | 0.95 |
| Claim 4 | **9** | **9** | 0.67 | 0.77 | 0.67 | 0.74 | 0.67 | 0.77 | 0.63 | 0.74 | 0.68 | 0.76 | 0.67 | 0.78 | 0.68 | 0.76 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Economically Disadvantaged for Grade Eight—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **14–17** | **14–17** | 0.66 | 0.68 | 0.75 | 0.62 | 0.67 | 0.67 | 0.72 | 0.62 | 0.68 | 0.67 | 0.65 | 0.69 | 0.72 | 0.64 |
| Claim 2 | **8** | **9** | 0.68 | 0.69 | 0.66 | 0.69 | 0.66 | 0.68 | 0.62 | 0.68 | 0.67 | 0.68 | 0.68 | 0.70 | 0.68 | 0.68 |
| Claim 3 | **8–9** | **8–9** | 0.46 | 0.90 | 0.44 | 0.90 | 0.45 | 0.89 | 0.42 | 0.89 | 0.45 | 0.90 | 0.46 | 0.91 | 0.46 | 0.90 |
| Claim 4 | **9** | **9** | 0.63 | 0.76 | 0.68 | 0.71 | 0.64 | 0.74 | 0.66 | 0.71 | 0.66 | 0.74 | 0.63 | 0.77 | 0.67 | 0.73 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Economically Disadvantaged for Grade Eleven—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **15–16** | **15–16** | 0.72 | 0.68 | 0.74 | 0.65 | 0.70 | 0.68 | 0.72 | 0.65 | 0.72 | 0.67 | 0.70 | 0.70 | 0.74 | 0.67 |
| Claim 2 | **8** | **9** | 0.67 | 0.80 | 0.67 | 0.75 | 0.68 | 0.78 | 0.63 | 0.74 | 0.68 | 0.77 | 0.66 | 0.80 | 0.69 | 0.77 |
| Claim 3 | **8–9** | **8–9** | 0.41 | 1.04 | 0.43 | 1.02 | 0.40 | 1.04 | 0.38 | 1.01 | 0.41 | 1.03 | 0.41 | 1.04 | 0.44 | 1.02 |
| Claim 4 | **9** | **9** | 0.62 | 0.85 | 0.63 | 0.80 | 0.63 | 0.84 | 0.60 | 0.80 | 0.64 | 0.83 | 0.62 | 0.85 | 0.66 | 0.83 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Economically Disadvantaged for Grade Three—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **17–20** | **17–20** | 0.88 | 0.34 | 0.89 | 0.34 | 0.88 | 0.34 | 0.88 | 0.34 | 0.88 | 0.34 | 0.88 | 0.35 | 0.89 | 0.34 |
| Claim 2 | **8–10** | **8** | 0.62 | 0.59 | 0.73 | 0.52 | 0.64 | 0.56 | 0.71 | 0.52 | 0.65 | 0.57 | 0.58 | 0.61 | 0.69 | 0.55 |
| Claim 3 | **8–10** | **8** | 0.64 | 0.61 | 0.76 | 0.53 | 0.68 | 0.59 | 0.73 | 0.53 | 0.68 | 0.59 | 0.63 | 0.62 | 0.72 | 0.56 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Economically Disadvantaged for Grade Four—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **17–20** | **17–20** | 0.87 | 0.36 | 0.89 | 0.33 | 0.88 | 0.34 | 0.88 | 0.33 | 0.88 | 0.35 | 0.88 | 0.36 | 0.89 | 0.34 |
| Claim 2 | **8–10** | **8** | 0.66 | 0.57 | 0.75 | 0.53 | 0.67 | 0.55 | 0.72 | 0.53 | 0.68 | 0.56 | 0.64 | 0.58 | 0.72 | 0.54 |
| Claim 3 | **8–10** | **8** | 0.61 | 0.65 | 0.75 | 0.54 | 0.65 | 0.60 | 0.73 | 0.54 | 0.65 | 0.62 | 0.58 | 0.67 | 0.70 | 0.59 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Economically Disadvantaged for Grade Five—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **17–20** | **17–20** | 0.86 | 0.43 | 0.89 | 0.38 | 0.86 | 0.42 | 0.87 | 0.39 | 0.86 | 0.42 | 0.85 | 0.44 | 0.88 | 0.41 |
| Claim 2 | **8–10** | **8** | 0.53 | 0.66 | 0.72 | 0.56 | 0.55 | 0.63 | 0.68 | 0.57 | 0.57 | 0.64 | 0.47 | 0.68 | 0.64 | 0.60 |
| Claim 3 | **8–10** | **8** | 0.57 | 0.76 | 0.71 | 0.65 | 0.60 | 0.74 | 0.68 | 0.66 | 0.58 | 0.74 | 0.50 | 0.79 | 0.65 | 0.71 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Economically Disadvantaged for Grade Six—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **16–20** | **16–20** | 0.86 | 0.50 | 0.89 | 0.43 | 0.87 | 0.46 | 0.88 | 0.43 | 0.86 | 0.48 | 0.85 | 0.51 | 0.87 | 0.46 |
| Claim 2 | **8–10** | **8** | 0.58 | 0.73 | 0.75 | 0.60 | 0.63 | 0.69 | 0.72 | 0.61 | 0.61 | 0.71 | 0.54 | 0.77 | 0.68 | 0.66 |
| Claim 3 | **8–10** | **8** | 0.58 | 0.81 | 0.74 | 0.66 | 0.62 | 0.76 | 0.71 | 0.67 | 0.61 | 0.77 | 0.54 | 0.82 | 0.67 | 0.73 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Economically Disadvantaged for Grade Seven—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **16–20** | **16–20** | 0.86 | 0.50 | 0.90 | 0.44 | 0.86 | 0.47 | 0.88 | 0.44 | 0.86 | 0.49 | 0.84 | 0.52 | 0.88 | 0.47 |
| Claim 2 | **8–10** | **8** | 0.50 | 0.87 | 0.73 | 0.70 | 0.50 | 0.85 | 0.67 | 0.73 | 0.52 | 0.85 | 0.39 | 0.90 | 0.63 | 0.78 |
| Claim 3 | **8–10** | **8** | 0.44 | 0.98 | 0.67 | 0.81 | 0.44 | 0.95 | 0.62 | 0.84 | 0.47 | 0.96 | 0.39 | 1.01 | 0.57 | 0.91 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Economically Disadvantaged for Grade Eight—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **16–20** | **16–20** | 0.83 | 0.57 | 0.89 | 0.50 | 0.85 | 0.55 | 0.87 | 0.51 | 0.84 | 0.55 | 0.82 | 0.58 | 0.86 | 0.53 |
| Claim 2 | **8–10** | **8** | 0.55 | 0.88 | 0.78 | 0.70 | 0.62 | 0.85 | 0.71 | 0.74 | 0.60 | 0.85 | 0.50 | 0.90 | 0.68 | 0.79 |
| Claim 3 | **8–10** | **8** | 0.47 | 0.97 | 0.70 | 0.82 | 0.52 | 0.94 | 0.64 | 0.85 | 0.52 | 0.96 | 0.44 | 0.99 | 0.60 | 0.92 |

Table 8.D. Claim Reliabilities and SEM by Primary Ethnicity for Economically Disadvantaged for Grade Eleven—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Claim** | **No. of Items** | **FT No. of Items** | **American Indian or Alaska Native Reliability** | **American Indian or Alaska Native SEM** | **Asian Reliability** | **Asian SEM** | **Native Hawaiian or Other Pacific Islander Reliability** | **Native Hawaiian or Other Pacific Islander SEM** | **Filipino Reliability** | **Filipino SEM** | **Hispanic or Latino Reliability** | **Hispanic or Latino SEM** | **Black or African American Reliability** | **Black or African American SEM** | **White Reliability** | **White SEM** |
| Claim 1 | **19–22** | **19–22** | 0.82 | 0.59 | 0.91 | 0.47 | 0.85 | 0.56 | 0.88 | 0.49 | 0.83 | 0.57 | 0.80 | 0.61 | 0.87 | 0.54 |
| Claim 2 | **8–10** | **8** | 0.27 | 1.19 | 0.66 | 0.91 | 0.34 | 1.16 | 0.54 | 0.98 | 0.34 | 1.15 | 0.10 | 1.28 | 0.50 | 1.07 |
| Claim 3 | **8–10** | **8** | 0.28 | 1.21 | 0.64 | 0.97 | 0.37 | 1.16 | 0.54 | 1.02 | 0.34 | 1.17 | 0.18 | 1.23 | 0.49 | 1.12 |

### Appendix 8.E: Scale Score CSEM Distribution

**Notes:**

* Conditional standard errors of measurement (CSEMs) reported in these tables and figures are not truncated.
* An expression that opens with a bracket and closes with a parenthesis indicates that a value is greater than or equal to the first number and is less than the second number. For example, “[20, 25)” indicates a value greater than or equal to 20 but less than 25.

Figure 8.E.1 for grade three ELA presents the CSEM distribution plot chart that was created using the data in table 8.E.1, which immediately follows. Its y-axis shows the CSEM values from 0 to 100 in intervals of 10. Its x-axis shows corresponding scale score values from 2100 to 2850 in intervals of 100. The plots of the line graph form a U shape, representing the relationship between the CSEM values and the scale scores.

CSEM values are larger—closer to 70—at the low end of the scale score range (closer to 2100). As the scale scores increase from the low end, on the left, the CSEM values decrease, becoming smaller in the middle of the scale scores (closer to 2400). After that, at the high end of the scale scores, on the right, the CSEM values are larger again. Figure 8.E.1 indicates that the scale scores in the middle were estimated more accurately due to the smaller CSEM values.

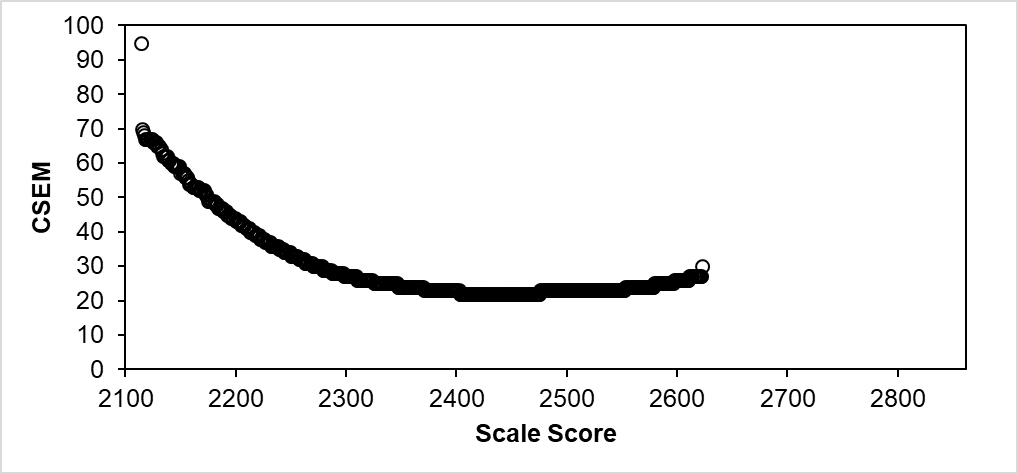


Figure 8.E. Scale Score CSEM Distribution Plots for Grade Three—ELA

Table 8.E. Scale Score CSEM Distribution for Grade Three—ELA

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CSEM Range** | **N** | **Cumulative Frequency** | **Percent** | **Cumulative Percent** |
| [20, 25) | 325,716 | 325,716 | 74% | 74% |
| [25, 30) | 85,184 | 410,900 | 19% | 93% |
| [30, 35) | 23,275 | 434,175 | 5% | 98% |
| [35, 40) | 5,251 | 439,426 | 1% | 99% |
| [40, 45) | 1,861 | 441,287 | 0% | 100% |
| [45, 50) | 715 | 442,002 | 0% | 100% |
| [50, 55) | 279 | 442,281 | 0% | 100% |
| [55, 60) | 149 | 442,430 | 0% | 100% |
| [60, 65) | 80 | 442,510 | 0% | 100% |
| [65, 70) | 48 | 442,558 | 0% | 100% |
| [70, 75) | 3 | 442,561 | 0% | 100% |
| [95, 100) | 81 | 442,642 | 0% | 100% |

Figure 8.E.2 for grade four ELA presents the CSEM distribution plot chart that was created using the data in table 8.E.2, which immediately follows. Its y-axis shows the CSEM values from 0 to 100 in intervals of 10. Its x-axis shows corresponding scale score values from 2100 to 2850 in intervals of 100. The plots of the line graph form a U shape, representing the relationship between the CSEM values and the scale scores.

CSEM values are larger—closer to 70—at the low end of the scale score range (closer to 2100). As the scale scores increase from the low end, on the left, the CSEM values decrease, becoming smaller in the middle of the scale scores (closer to 2500). After that, at the high end of the scale scores, on the right, the CSEM values are larger again. Figure 8.E.2 indicates that the scale scores in the middle were estimated more accurately due to the smaller CSEM values.

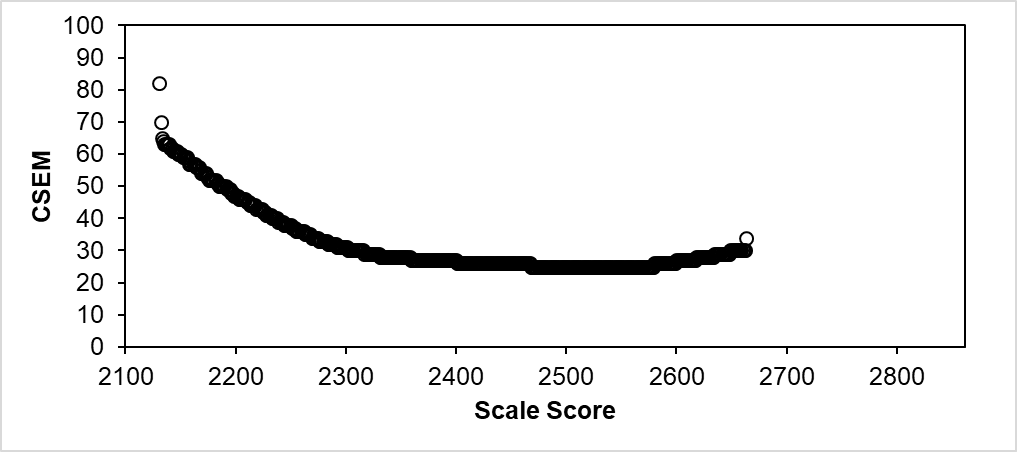


Figure 8.E. Scale Score CSEM Distribution Plots for Grade Four—ELA

Table 8.E. Scale Score CSEM Distribution for Grade Four—ELA

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CSEM Range** | **N** | **Cumulative Frequency** | **Percent** | **Cumulative Percent** |
| [25, 30) | 391,106 | 391,106 | 90% | 90% |
| [30, 35) | 35,215 | 426,321 | 8% | 98% |
| [35, 40) | 5,749 | 432,070 | 1% | 99% |
| [40, 45) | 1,907 | 433,977 | 0% | 100% |
| [45, 50) | 699 | 434,676 | 0% | 100% |
| [50, 55) | 366 | 435,042 | 0% | 100% |
| [55, 60) | 112 | 435,154 | 0% | 100% |
| [60, 65) | 61 | 435,215 | 0% | 100% |
| [65, 70) | 1 | 435,216 | 0% | 100% |
| [70, 75) | 3 | 435,219 | 0% | 100% |
| [80, 85) | 87 | 435,306 | 0% | 100% |

Figure 8.E.3 for grade five ELA presents the CSEM distribution plot chart that was created using the data in table 8.E.3, which immediately follows. Its y-axis shows the CSEM values from 0 to 100 in intervals of 10. Its x-axis shows corresponding scale score values from 2100 to 2850 in intervals of 100. The plots of the line graph form a U shape, representing the relationship between the CSEM values and the scale scores.

CSEM values are larger—closer to 50—at the low end of the scale score range (closer to 2200). As the scale scores increase from the low end, on the left, the CSEM values decrease, becoming smaller in the middle of the scale scores (closer to 2500). After that, at the high end of the scale scores, on the right, the CSEM values are larger again. Figure 8.E.3 indicates that the scale scores in the middle were estimated more accurately due to the smaller CSEM values.

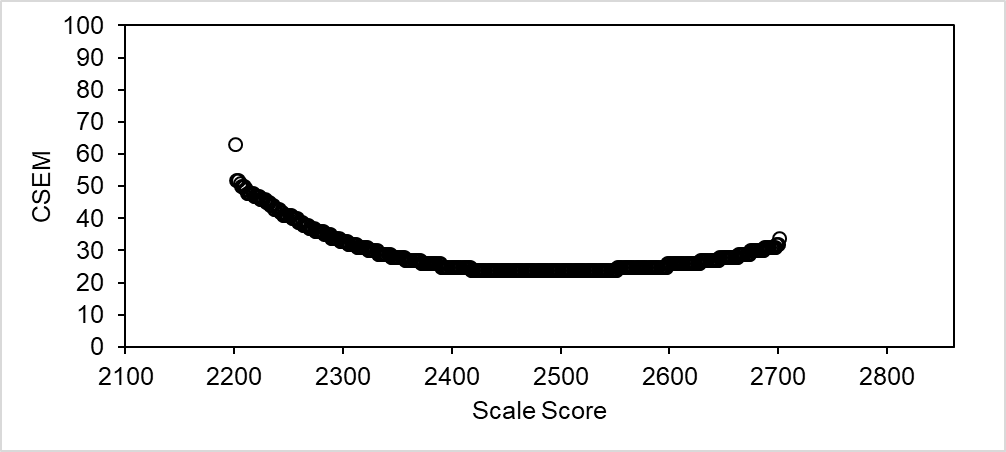


Figure 8.E. Scale Score CSEM Distribution Plots for Grade Five—ELA

Table 8.E. Scale Score CSEM Distribution for Grade Five—ELA

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CSEM Range** | **N** | **Cumulative Frequency** | **Percent** | **Cumulative Percent** |
| [20, 25) | 201,539 | 201,539 | 44% | 44% |
| [25, 30) | 211,240 | 412,779 | 46% | 91% |
| [30, 35) | 35,029 | 447,808 | 8% | 99% |
| [35, 40) | 4,380 | 452,188 | 1% | 99% |
| [40, 45) | 1,434 | 453,622 | 0% | 100% |
| [45, 50) | 521 | 454,143 | 0% | 100% |
| [50, 55) | 100 | 454,243 | 0% | 100% |
| [60, 65) | 307 | 454,550 | 0% | 100% |

Figure 8.E.4 for grade six ELA presents the CSEM distribution plot chart that was created using the data in table 8.E.4, which immediately follows. Its y-axis shows the CSEM values from 0 to 100 in intervals of 10. Its x-axis shows corresponding scale score values from 2100 to 2850 in intervals of 100. The plots of the line graph form a U shape, representing the relationship between the CSEM values and the scale scores.

CSEM values are larger—closer to 60—at the low end of the scale score range (closer to 2200). As the scale scores increase from the low end, on the left, the CSEM values decrease, becoming smaller in the middle of the scale scores (closer to 2500). After that, at the high end of the scale scores, on the right, the CSEM values are larger again. Figure 8.E.4 indicates that the scale scores in the middle were estimated more accurately due to the smaller CSEM values.

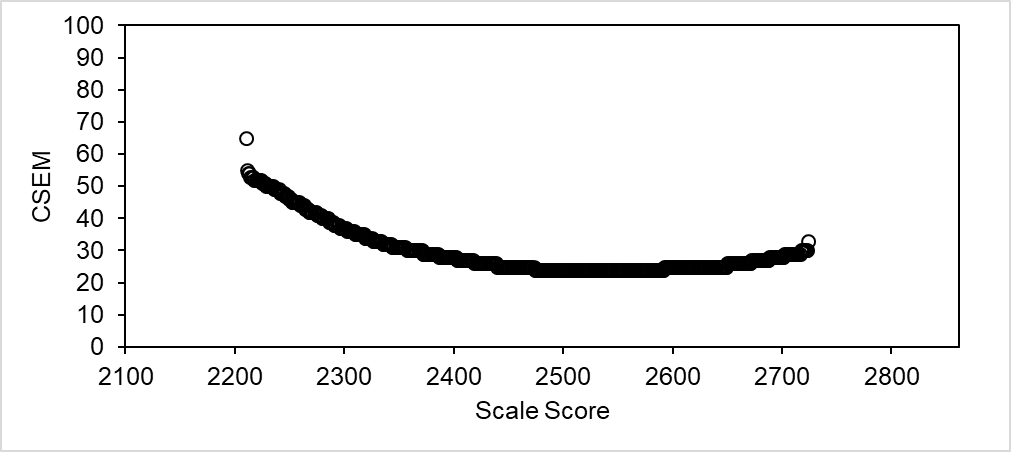


Figure 8.E. Scale Score CSEM Distribution Plots for Grade Six—ELA

Table 8.E. Scale Score CSEM Distribution for Grade Six—ELA

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CSEM Range** | **N** | **Cumulative Frequency** | **Percent** | **Cumulative Percent** |
| [20, 25) | 192,695 | 192,695 | 42% | 42% |
| [25, 30) | 221,821 | 414,516 | 48% | 91% |
| [30, 35) | 33,108 | 447,624 | 7% | 98% |
| [35, 40) | 6,406 | 454,030 | 1% | 99% |
| [40, 45) | 2,008 | 456,038 | 0% | 100% |
| [45, 50) | 780 | 456,818 | 0% | 100% |
| [50, 55) | 339 | 457,157 | 0% | 100% |
| [55, 60) | 6 | 457,163 | 0% | 100% |
| [65, 70) | 243 | 457,406 | 0% | 100% |

Figure 8.E.5 for grade seven ELA presents the CSEM distribution plot chart that was created using the data in table 8.E.5, which immediately follows. Its y-axis shows the CSEM values from 0 to 100 in intervals of 10. Its x-axis shows corresponding scale score values from 2100 to 2850 in intervals of 100. The plots of the line graph form a U shape, representing the relationship between the CSEM values and the scale scores.

CSEM values are larger—closer to 50—at the low end of the scale score range (closer to 2250). As the scale scores increase from the low end, on the left, the CSEM values decrease, becoming smaller in the middle of the scale scores (closer to 2550). After that, at the high end of the scale scores, on the right, the CSEM values are larger again. Figure 8.E.5 indicates that the scale scores in the middle were estimated more accurately due to the smaller CSEM values.

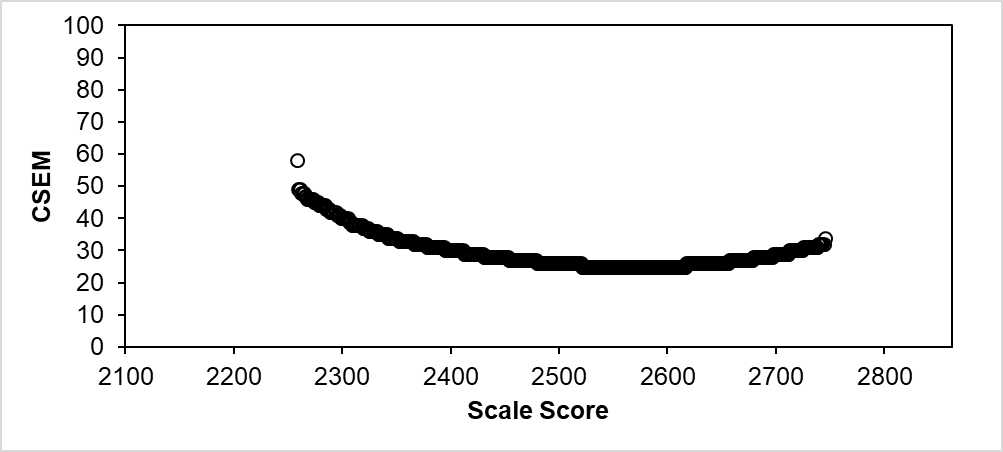


Figure 8.E. Scale Score CSEM Distribution Plots for Grade Seven—ELA

Table 8.E. Scale Score CSEM Distribution for Grade Seven—ELA

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CSEM Range** | **N** | **Cumulative Frequency** | **Percent** | **Cumulative Percent** |
| [25, 30) | 389,232 | 389,232 | 83% | 83% |
| [30, 35) | 68,975 | 458,207 | 15% | 97% |
| [35, 40) | 9,106 | 467,313 | 2% | 99% |
| [40, 45) | 2,589 | 469,902 | 1% | 100% |
| [45, 50) | 816 | 470,718 | 0% | 100% |
| [55, 60) | 774 | 471,492 | 0% | 100% |

Figure 8.E.6 for grade eight ELA presents the CSEM distribution plot chart that was created using the data in table 8.E.6, which immediately follows. Its y-axis shows the CSEM values from 0 to 100 in intervals of 10. Its x-axis shows corresponding scale score values from 2100 to 2850 in intervals of 100. The plots of the line graph form a U shape, representing the relationship between the CSEM values and the scale scores.

CSEM values are larger—closer to 50—at the low end of the scale score range (closer to 2290). As the scale scores increase from the low end, on the left, the CSEM values decrease, becoming smaller in the middle of the scale scores. After that, at the high end of the scale scores, on the right, the CSEM values are larger again. Figure 8.E.6 indicates that the scale scores in the middle were estimated more accurately due to the smaller CSEM values.

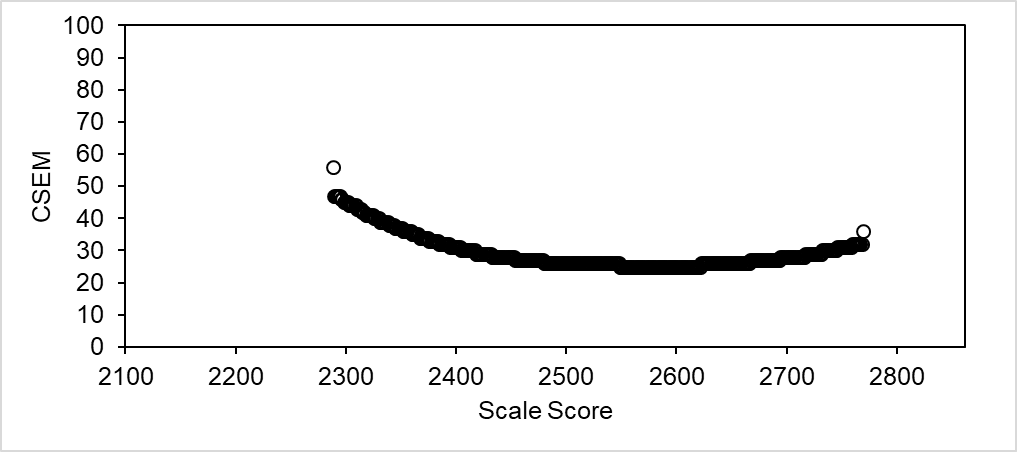


Figure 8.E. Scale Score CSEM Distribution Plots for Grade Eight—ELA

Table 8.E. Scale Score CSEM Distribution for Grade Eight—ELA

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CSEM Range** | **N** | **Cumulative Frequency** | **Percent** | **Cumulative Percent** |
| [25, 30) | 393,726 | 393,726 | 85% | 85% |
| [30, 35) | 43,870 | 437,596 | 10% | 95% |
| [35, 40) | 18,491 | 456,087 | 4% | 99% |
| [40, 45) | 3,205 | 459,292 | 1% | 100% |
| [45, 50) | 814 | 460,106 | 0% | 100% |
| [55, 60) | 1,359 | 461,465 | 0% | 100% |

Figure 8.E.7 for grade eleven ELA presents the CSEM distribution plot chart that was created using the data in table 8.E.7, which immediately follows. Its y-axis shows the CSEM values from 0 to 100 in intervals of 10. Its x-axis shows corresponding scale score values from 2100 to 2850 in intervals of 100. The plots of the line graph form a U shape, representing the relationship between the CSEM values and the scale scores.

CSEM values are larger—closer to 50—at the low end of the scale score range (closer to 2300). As the scale scores increase from the low end, on the left, the CSEM values decrease, becoming smaller in the middle of the scale scores (closer to 2600). After that, at the high end of the scale scores, on the right, the CSEM values are larger again. Figure 8.E.7 indicates that the scale scores in the middle were estimated more accurately due to the smaller CSEM values.

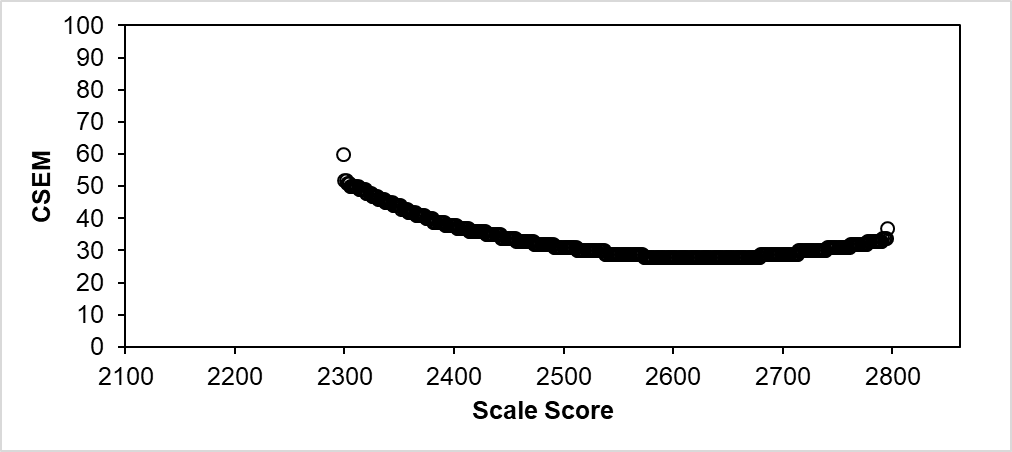


Figure 8.E. Scale Score CSEM Distribution Plots for Grade Eleven—ELA

Table 8.E. Scale Score CSEM Distribution for Grade Eleven—ELA

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CSEM Range** | **N** | **Cumulative Frequency** | **Percent** | **Cumulative Percent** |
| [25, 30) | 223,222 | 223,222 | 51% | 51% |
| [30, 35) | 144,938 | 368,160 | 33% | 84% |
| [35, 40) | 53,006 | 421,166 | 12% | 96% |
| [40, 45) | 11,168 | 432,334 | 3% | 98% |
| [45, 50) | 4,373 | 436,707 | 1% | 99% |
| [50, 55) | 1,003 | 437,710 | 0% | 99% |
| [60, 65) | 2,230 | 439,940 | 1% | 100% |

Figure 8.E.8 for grade three mathematics presents the CSEM distribution plot chart that was created using the data in table 8.E.8, which immediately follows. Its y-axis shows the CSEM values from 0 to 100 in intervals of 10. Its x-axis shows corresponding scale score values from 2100 to 2850 in intervals of 100. The plots of the line graph form a U shape, representing the relationship between the CSEM values and the scale scores.

CSEM values are larger—closer to 40—at the low end of the scale score range (closer to 2200). As the scale scores increase from the low end, on the left, the CSEM values decrease, becoming smaller in the middle of the scale scores (closer to 2500). After that, at the high end of the scale scores, on the right, the CSEM values are larger again. Figure 8.E.8 indicates that the scale scores in the middle were estimated more accurately due to the smaller CSEM values.

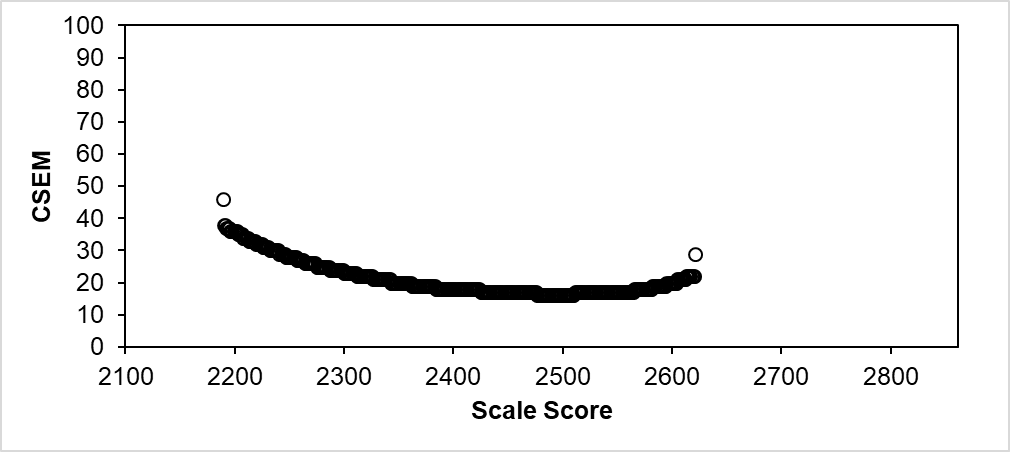


Figure 8.E. Scale Score CSEM Distribution Plots for Grade Three—Mathematics

Table 8.E. Scale Score CSEM Distribution for Grade Three—Mathematics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CSEM Range** | **N** | **Cumulative Frequency** | **Percent** | **Cumulative Percent** |
| [15, 20) | 343,238 | 343,238 | 77% | 77% |
| [20, 25) | 75,919 | 419,157 | 17% | 94% |
| [25, 30) | 19,779 | 438,936 | 4% | 99% |
| [30, 35) | 4,015 | 442,951 | 1% | 100% |
| [35, 40) | 946 | 443,897 | 0% | 100% |
| [45, 50) | 953 | 444,850 | 0% | 100% |

Figure 8.E.9 for grade four mathematics presents the CSEM distribution plot chart that was created using the data in table 8.E.9, which immediately follows. Its y-axis shows the CSEM values from 0 to 100 in intervals of 10. Its x-axis shows corresponding scale score values from 2100 to 2850 in intervals of 100. The plots of the line graph form a U shape, representing the relationship between the CSEM values and the scale scores.

CSEM values are larger—closer to 50—at the low end of the scale score range (closer to 2200). As the scale scores increase from the low end, on the left, the CSEM values decrease, becoming smaller in the middle of the scale scores (closer to 2500). After that, at the high end of the scale scores, on the right, the CSEM values are larger again. Figure 8.E.9 indicates that the scale scores in the middle were estimated more accurately due to the smaller CSEM values.

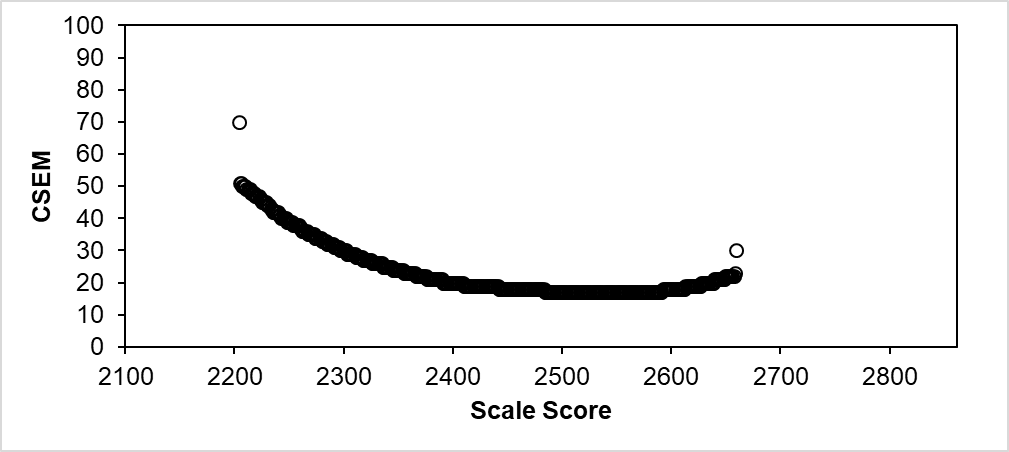


Figure 8.E. Scale Score CSEM Distribution Plots for Grade Four—Mathematics

Table 8.E. Scale Score CSEM Distribution for Grade Four—Mathematics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CSEM Range** | **N** | **Cumulative Frequency** | **Percent** | **Cumulative Percent** |
| [15, 20) | 313,504 | 313,504 | 72% | 72% |
| [20, 25) | 84,980 | 398,484 | 19% | 91% |
| [25, 30) | 19,157 | 417,641 | 4% | 95% |
| [30, 35) | 13,767 | 431,408 | 3% | 99% |
| [35, 40) | 2,852 | 434,260 | 1% | 99% |
| [40, 45) | 1,168 | 435,428 | 0% | 100% |
| [45, 50) | 808 | 436,236 | 0% | 100% |
| [50, 55) | 196 | 436,432 | 0% | 100% |
| [70, 75) | 965 | 437,397 | 0% | 100% |

Figure 8.E.10 for grade five mathematics presents the CSEM distribution plot chart that was created using the data in table 8.E.10, which immediately follows. Its y-axis shows the CSEM values from 0 to 100 in intervals of 10. Its x-axis shows corresponding scale score values from 2100 to 2850 in intervals of 100. The plots of the line graph form a U shape, representing the relationship between the CSEM values and the scale scores.

CSEM values are larger—closer to 60—at the low end of the scale score range (closer to 2200). As the scale scores increase from the low end, on the left, the CSEM values decrease, becoming smaller in the middle of the scale scores (closer to 2600). After that, at the high end of the scale scores, on the right, the CSEM values are larger again. Figure 8.E.10 indicates that the scale scores in the middle were estimated more accurately due to the smaller CSEM values.

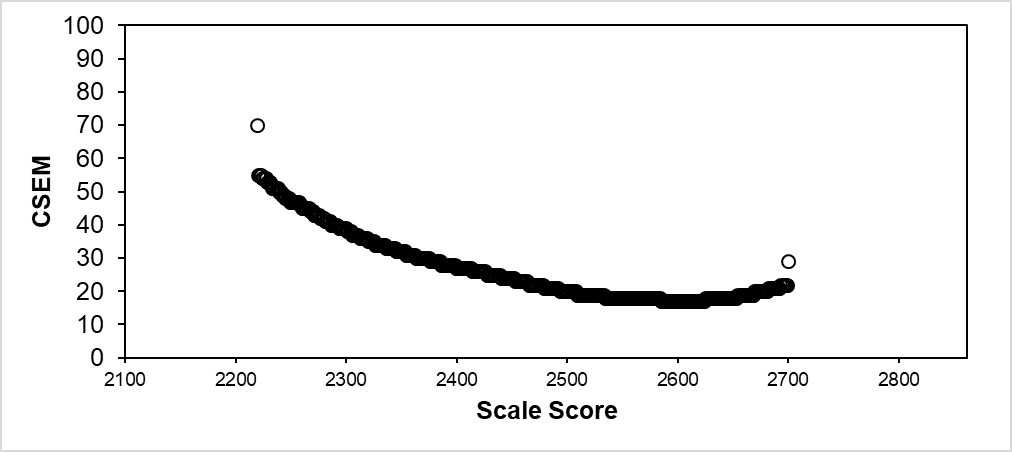


Figure 8.E. Scale Score CSEM Distribution Plots for Grade Five—Mathematics

Table 8.E. Scale Score CSEM Distribution for Grade Five—Mathematics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CSEM Range** | **N** | **Cumulative Frequency** | **Percent** | **Cumulative Percent** |
| [15, 20) | 188,371 | 188,371 | 41% | 41% |
| [20, 25) | 123,709 | 312,080 | 27% | 68% |
| [25, 30) | 94,164 | 406,244 | 21% | 89% |
| [30, 35) | 33,187 | 439,431 | 7% | 96% |
| [35, 40) | 9,875 | 449,306 | 2% | 98% |
| [40, 45) | 3,710 | 453,016 | 1% | 99% |
| [45, 50) | 1,773 | 454,789 | 0% | 100% |
| [50, 55) | 648 | 455,437 | 0% | 100% |
| [55, 60) | 95 | 455,532 | 0% | 100% |
| [70, 75) | 798 | 456,330 | 0% | 100% |

Figure 8.E.11 for grade six mathematics presents the CSEM distribution plot chart that was created using the data in table 8.E.11, which immediately follows. Its y-axis shows the CSEM values from 0 to 100 in intervals of 10. Its x-axis shows corresponding scale score values from 2100 to 2850 in intervals of 100. The plots of the line graph form a U shape, representing the relationship between the CSEM values and the scale scores.

CSEM values are larger—closer to 60—at the low end of the scale score range (closer to 2230). As the scale scores increase from the low end, on the left, the CSEM values decrease, becoming smaller around the upper middle of the scale scores (closer to 2600). After that, at the high end of the scale scores, on the right, the CSEM values are larger again. Figure 8.E.11 indicates that the scale scores in the middle were estimated more accurately due to the smaller CSEM values.

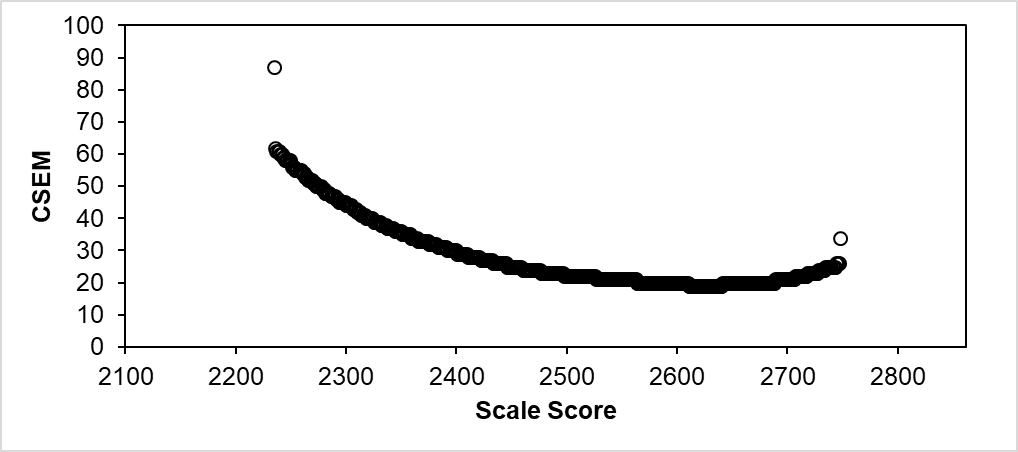


Figure 8.E. Scale Score CSEM Distribution Plots for Grade Six—Mathematics

Table 8.E. Scale Score CSEM Distribution for Grade Six—Mathematics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CSEM Range** | **N** | **Cumulative Frequency** | **Percent** | **Cumulative Percent** |
| [15, 20) | 32,812 | 32,812 | 7% | 7% |
| [20, 25) | 277,430 | 310,242 | 60% | 68% |
| [25, 30) | 67,218 | 377,460 | 15% | 82% |
| [30, 35) | 38,885 | 416,345 | 8% | 91% |
| [35, 40) | 18,052 | 434,397 | 4% | 95% |
| [40, 45) | 8,856 | 443,253 | 2% | 97% |
| [45, 50) | 5,192 | 448,445 | 1% | 98% |
| [50, 55) | 3,065 | 451,510 | 1% | 98% |
| [55, 60) | 1,995 | 453,505 | 0% | 99% |
| [60, 65) | 674 | 454,179 | 0% | 99% |
| [85, 90) | 4,812 | 458,991 | 1% | 100% |

Figure 8.E.12 for grade seven mathematics presents the CSEM distribution plot chart that was created using the data in table 8.E.12, which immediately follows. Its y-axis shows the CSEM values from 0 to 100 in intervals of 10. Its x-axis shows corresponding scale score values from 2100 to 2850 in intervals of 100. The plots of the line graph form a U shape, representing the relationship between the CSEM values and the scale scores.

CSEM values are larger—closer to 70—at the low end of the scale score range (closer to 2250). As the scale scores increase from the low end, on the left, the CSEM values decrease, becoming smaller around the upper middle of the scale scores (closer to 2700). After that, at the high end of the scale scores, on the right, the CSEM values are larger again. Figure 8.E.12 indicates that the scale scores in the middle were estimated more accurately due to the smaller CSEM values.

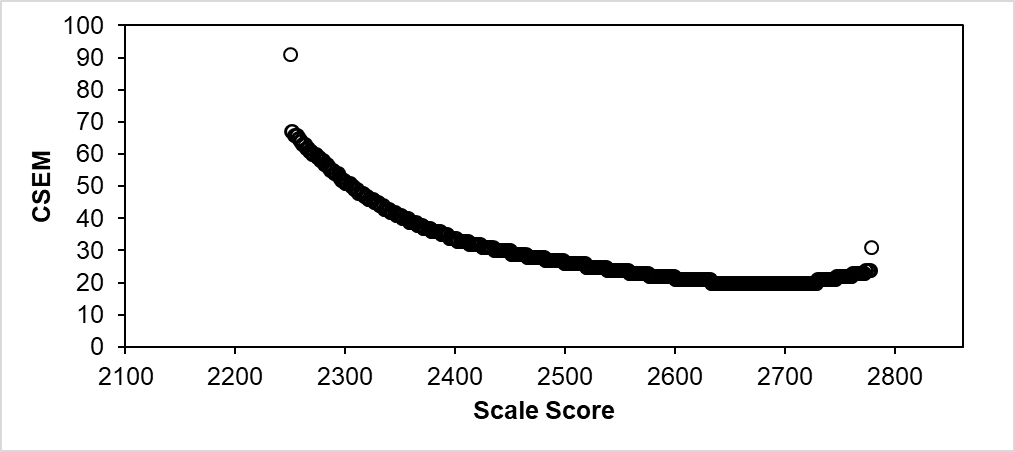


Figure 8.E. Scale Score CSEM Distribution Plots for Grade Seven—Mathematics

Table 8.E. Scale Score CSEM Distribution for Grade Seven—Mathematics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CSEM Range** | **N** | **Cumulative Frequency** | **Percent** | **Cumulative Percent** |
| [20, 25) | 213,771 | 213,771 | 45% | 45% |
| [25, 30) | 123,168 | 336,939 | 26% | 71% |
| [30, 35) | 68,087 | 405,026 | 14% | 86% |
| [35, 40) | 28,880 | 433,906 | 6% | 92% |
| [40, 45) | 15,953 | 449,859 | 3% | 95% |
| [45, 50) | 9,401 | 459,260 | 2% | 97% |
| [50, 55) | 4,803 | 464,063 | 1% | 98% |
| [55, 60) | 2,984 | 467,047 | 1% | 99% |
| [60, 65) | 1,869 | 468,916 | 0% | 99% |
| [65, 70) | 716 | 469,632 | 0% | 99% |
| [90, 95) | 3,342 | 472,974 | 1% | 100% |

Figure 8.E.13 for grade eight mathematics presents the CSEM distribution plot chart that was created using the data in table 8.E.13, which immediately follows. Its y-axis shows the CSEM values from 0 to 100 in intervals of 10. Its x-axis shows corresponding scale score values from 2100 to 2850 in intervals of 100. The plots of the line graph form a U shape, representing the relationship between the CSEM values and the scale scores.

CSEM values are larger—closer to 60—at the low end of the scale score range (closer to 2265). As the scale scores increase from the low end, on the left, the CSEM values decrease, becoming smaller around the upper middle of the scale scores (closer to 2700). After that, at the high end of the scale scores, on the right, the CSEM values are larger again. Figure 8.E.13 indicates that the scale scores in the middle were estimated more accurately due to the smaller CSEM values.

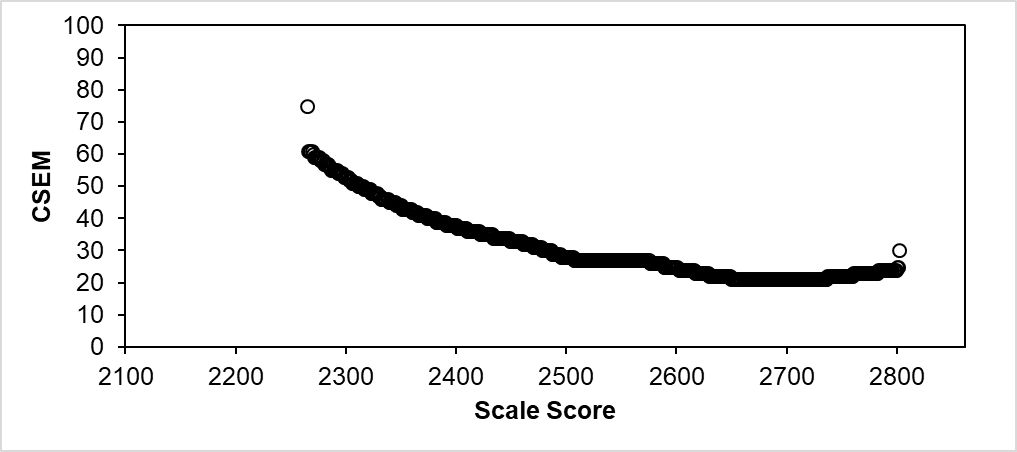


Figure 8.E. Scale Score CSEM Distribution Plots for Grade Eight—Mathematics

Table 8.E. Scale Score CSEM Distribution for Grade Eight—Mathematics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CSEM Range** | **N** | **Cumulative Frequency** | **Percent** | **Cumulative Percent** |
| [20, 25) | 138,105 | 138,105 | 30% | 30% |
| [25, 30) | 146,440 | 284,545 | 32% | 62% |
| [30, 35) | 74,997 | 359,542 | 16% | 78% |
| [35, 40) | 48,221 | 407,763 | 10% | 88% |
| [40, 45) | 24,986 | 432,749 | 5% | 94% |
| [45, 50) | 13,826 | 446,575 | 3% | 97% |
| [50, 55) | 7,041 | 453,616 | 2% | 98% |
| [55, 60) | 3,823 | 457,439 | 1% | 99% |
| [60, 65) | 575 | 458,014 | 0% | 99% |
| [75, 80) | 4,210 | 462,224 | 1% | 100% |

Figure 8.E.14 for grade eleven mathematics presents the CSEM distribution plot chart that was created using the data in table 8.E.14, which immediately follows. Its y-axis shows the CSEM values from 0 to 100 in intervals of 10. Its x-axis shows corresponding scale score values from 2100 to 2850 in intervals of 100. The plots of the line graph form a U shape, representing the relationship between the CSEM values and the scale scores.

CSEM values are larger—closer to 80—at the low end of the scale score range (closer to 2280). As the scale scores increase from the low end, on the left, the CSEM values decrease, becoming smaller around the upper middle of the scale scores (closer to 2750). After that, at the high end of the scale scores, on the right, the CSEM values are larger again. Figure 8.E.14 indicates that the scale scores in the middle were estimated more accurately due to the smaller CSEM values.

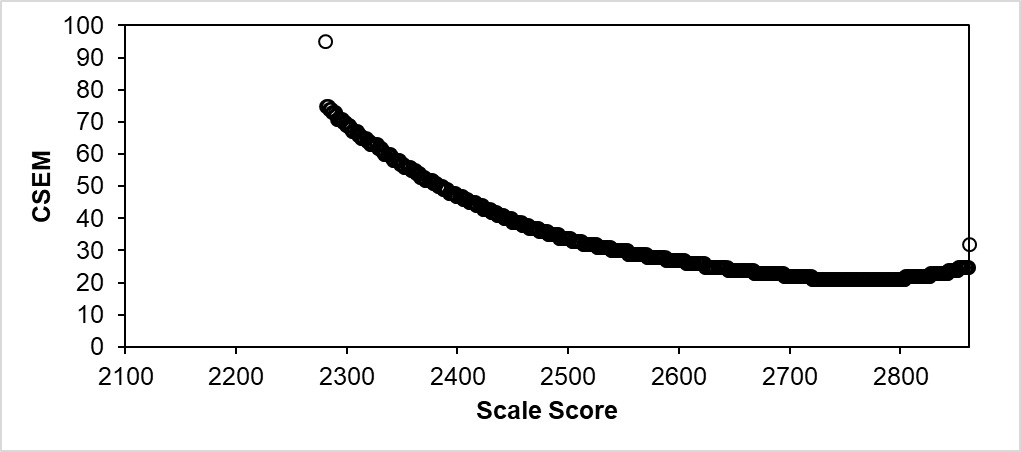


Figure 8.E. Scale Score CSEM Distribution Plots for Grade Eleven—Mathematics

Table 8.E. Scale Score CSEM Distribution for Grade Eleven—Mathematics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CSEM Range** | **N** | **Cumulative Frequency** | **Percent** | **Cumulative Percent** |
| [20, 25) | 116,345 | 116,345 | 27% | 27% |
| [25, 30) | 103,330 | 219,675 | 24% | 50% |
| [30, 35) | 77,183 | 296,858 | 18% | 68% |
| [35, 40) | 49,025 | 345,883 | 11% | 79% |
| [40, 45) | 31,450 | 377,333 | 7% | 86% |
| [45, 50) | 22,326 | 399,659 | 5% | 91% |
| [50, 55) | 13,121 | 412,780 | 3% | 94% |
| [55, 60) | 8,721 | 421,501 | 2% | 96% |
| [60, 65) | 5,828 | 427,329 | 1% | 98% |
| [65, 70) | 3,362 | 430,691 | 1% | 98% |
| [70, 75) | 1,884 | 432,575 | 0% | 99% |
| [75, 80) | 329 | 432,904 | 0% | 99% |
| [95, 100) | 5,195 | 438,099 | 1% | 100% |

### Appendix 8.F: Analyses of Classification

**Notes:**

* For the tables on decision accuracy, the horizontal headers indicate values of classification by all-forms average (the true score), while the vertical headers indicate values of classification by form taken category.
* For the tables on decision consistency, the horizontal headers indicate values of classification by alternate form, while the vertical headers indicate values of classification by form taken category.

Table 8.F. Decision Accuracy for Grade Three—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2114–2366 | 0.24 | 0.04 | 0.00 | 0.00 | 0.28 |
| 2367–2431 | 0.03 | 0.16 | 0.04 | 0.00 | 0.24 |
| 2432–2489 | 0.00 | 0.05 | 0.15 | 0.03 | 0.22 |
| 2490–2623 | 0.00 | 0.00 | 0.04 | 0.22 | 0.25 |

All-forms average, estimated proportion correctly classified: total = 0.77; Standard Met and Exceeded = 0.91

Table 8.F. Decision Consistency for Grade Three—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2114–2366 | 0.23 | 0.05 | 0.00 | 0.00 | 0.28 |
| 2367–2431 | 0.05 | 0.13 | 0.05 | 0.00 | 0.24 |
| 2432–2489 | 0.00 | 0.06 | 0.12 | 0.05 | 0.22 |
| 2490–2623 | 0.00 | 0.00 | 0.04 | 0.21 | 0.25 |

Alternate form, estimated proportion consistently classified: total = 0.69; Standard Met and Exceeded = 0.88

Table 8.F. Decision Accuracy for Grade Four—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2131–2415 | 0.28 | 0.04 | 0.00 | 0.00 | 0.32 |
| 2416–2472 | 0.03 | 0.12 | 0.04 | 0.00 | 0.20 |
| 2473–2532 | 0.00 | 0.05 | 0.15 | 0.03 | 0.23 |
| 2533–2663 | 0.00 | 0.00 | 0.04 | 0.22 | 0.25 |

All-forms average, estimated proportion correctly classified: total = 0.76; Standard Met and Exceeded = 0.91

Table 8.F. Decision Consistency for Grade Four—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2131–2415 | 0.26 | 0.05 | 0.01 | 0.00 | 0.32 |
| 2416–2472 | 0.05 | 0.10 | 0.05 | 0.00 | 0.20 |
| 2473–2532 | 0.01 | 0.05 | 0.12 | 0.05 | 0.23 |
| 2533–2663 | 0.00 | 0.00 | 0.04 | 0.21 | 0.25 |

Alternate form, estimated proportion consistently classified: total = 0.68; Standard Met and Exceeded = 0.88

Table 8.F. Decision Accuracy for Grade Five—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2201–2441 | 0.25 | 0.03 | 0.00 | 0.00 | 0.28 |
| 2442–2501 | 0.04 | 0.12 | 0.04 | 0.00 | 0.20 |
| 2502–2581 | 0.00 | 0.04 | 0.20 | 0.03 | 0.28 |
| 2582–2701 | 0.00 | 0.00 | 0.03 | 0.21 | 0.24 |

All-forms average, estimated proportion correctly classified: total = 0.78; Standard Met and Exceeded = 0.91

Table 8.F. Decision Consistency for Grade Five—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2201–2441 | 0.24 | 0.04 | 0.00 | 0.00 | 0.28 |
| 2442–2501 | 0.05 | 0.09 | 0.05 | 0.00 | 0.20 |
| 2502–2581 | 0.01 | 0.05 | 0.17 | 0.05 | 0.28 |
| 2582–2701 | 0.00 | 0.00 | 0.04 | 0.20 | 0.24 |

Alternate form, estimated proportion consistently classified: total = 0.70; Standard Met and Exceeded = 0.88

Table 8.F. Decision Accuracy for Grade Six—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2210–2456 | 0.22 | 0.04 | 0.00 | 0.00 | 0.25 |
| 2457–2530 | 0.03 | 0.17 | 0.04 | 0.00 | 0.25 |
| 2531–2617 | 0.00 | 0.05 | 0.23 | 0.03 | 0.31 |
| 2618–2724 | 0.00 | 0.00 | 0.03 | 0.16 | 0.19 |

All-forms average, estimated proportion correctly classified: total = 0.78; Standard Met and Exceeded = 0.91

Table 8.F. Decision Consistency for Grade Six—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2210–2456 | 0.21 | 0.05 | 0.00 | 0.00 | 0.25 |
| 2457–2530 | 0.05 | 0.13 | 0.06 | 0.00 | 0.25 |
| 2531–2617 | 0.00 | 0.06 | 0.20 | 0.05 | 0.31 |
| 2618–2724 | 0.00 | 0.00 | 0.04 | 0.15 | 0.19 |

Alternate form, estimated proportion consistently classified: total = 0.69; Standard Met and Exceeded = 0.87

Table 8.F. Decision Accuracy for Grade Seven—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2258–2478 | 0.23 | 0.03 | 0.00 | 0.00 | 0.26 |
| 2479–2551 | 0.03 | 0.15 | 0.04 | 0.00 | 0.22 |
| 2552–2648 | 0.00 | 0.05 | 0.25 | 0.03 | 0.33 |
| 2649–2745 | 0.00 | 0.00 | 0.03 | 0.15 | 0.18 |

All-forms average, estimated proportion correctly classified: Total = 0.78; Standard Met and Exceeded = 0.91

Table 8.F. Decision Consistency for Grade Seven—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2258–2478 | 0.22 | 0.04 | 0.00 | 0.00 | 0.26 |
| 2479–2551 | 0.05 | 0.12 | 0.06 | 0.00 | 0.22 |
| 2552–2648 | 0.01 | 0.06 | 0.21 | 0.05 | 0.33 |
| 2649–2745 | 0.00 | 0.00 | 0.04 | 0.15 | 0.18 |

Alternate form, estimated proportion consistently classified: total = 0.69; Standard Met and Exceeded = 0.87

Table 8.F. Decision Accuracy for Grade Eight—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2288–2486 | 0.22 | 0.04 | 0.00 | 0.00 | 0.26 |
| 2487–2566 | 0.03 | 0.17 | 0.04 | 0.00 | 0.25 |
| 2567–2667 | 0.00 | 0.05 | 0.25 | 0.03 | 0.32 |
| 2668–2769 | 0.00 | 0.00 | 0.03 | 0.14 | 0.17 |

All-forms average, estimated proportion correctly classified: total = 0.78; Standard Met and Exceeded = 0.91

Table 8.F. Decision Consistency for Grade Eight—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2288–2486 | 0.21 | 0.05 | 0.00 | 0.00 | 0.26 |
| 2487–2566 | 0.05 | 0.14 | 0.06 | 0.00 | 0.25 |
| 2567–2667 | 0.00 | 0.06 | 0.21 | 0.05 | 0.32 |
| 2668–2769 | 0.00 | 0.00 | 0.04 | 0.13 | 0.17 |

Alternate form, estimated proportion consistently classified: total = 0.70; Standard Met and Exceeded = 0.87

Table 8.F. Decision Accuracy for Grade Eleven—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2299–2492 | 0.18 | 0.03 | 0.00 | 0.00 | 0.21 |
| 2493–2582 | 0.03 | 0.14 | 0.04 | 0.00 | 0.21 |
| 2583–2681 | 0.00 | 0.05 | 0.21 | 0.04 | 0.30 |
| 2682–2795 | 0.00 | 0.00 | 0.04 | 0.24 | 0.27 |

All-forms average, estimated proportion correctly classified: total = 0.77; Standard Met and Exceeded = 0.91

Table 8.F. Decision Consistency for Grade Eleven—ELA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2299–2492 | 0.17 | 0.04 | 0.00 | 0.00 | 0.21 |
| 2493–2582 | 0.04 | 0.12 | 0.06 | 0.00 | 0.21 |
| 2583–2681 | 0.01 | 0.06 | 0.18 | 0.06 | 0.30 |
| 2682–2795 | 0.00 | 0.00 | 0.05 | 0.23 | 0.27 |

Alternate form, estimated proportion consistently classified: total = 0.69; Standard Met and Exceeded = 0.88

Table 8.F. Decision Accuracy for Grade Three—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2189–2380 | 0.24 | 0.03 | 0.00 | 0.00 | 0.27 |
| 2381–2435 | 0.03 | 0.16 | 0.04 | 0.00 | 0.23 |
| 2436–2500 | 0.00 | 0.04 | 0.21 | 0.03 | 0.28 |
| 2501–2621 | 0.00 | 0.00 | 0.02 | 0.21 | 0.23 |

All-forms average, estimated proportion correctly classified: total = 0.81; Standard Met and Exceeded = 0.92

Table 8.F. Decision Consistency for Grade Three—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2189–2380 | 0.23 | 0.03 | 0.00 | 0.00 | 0.27 |
| 2381–2435 | 0.05 | 0.13 | 0.05 | 0.00 | 0.23 |
| 2436–2500 | 0.00 | 0.05 | 0.18 | 0.05 | 0.28 |
| 2501–2621 | 0.00 | 0.00 | 0.03 | 0.20 | 0.23 |

Alternate form, estimated proportion consistently classified: total = 0.74; Standard Met and Exceeded = 0.89

Table 8.F. Decision Accuracy for Grade Four—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2204–2410 | 0.22 | 0.02 | 0.00 | 0.00 | 0.25 |
| 2411–2484 | 0.04 | 0.22 | 0.04 | 0.00 | 0.30 |
| 2485–2548 | 0.00 | 0.04 | 0.19 | 0.03 | 0.25 |
| 2549–2659 | 0.00 | 0.00 | 0.02 | 0.18 | 0.20 |

All-forms average, estimated proportion correctly classified: total = 0.81; Standard Met and Exceeded = 0.92

Table 8.F. Decision Consistency for Grade Four—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2204–2410 | 0.21 | 0.03 | 0.00 | 0.00 | 0.25 |
| 2411–2484 | 0.05 | 0.19 | 0.06 | 0.01 | 0.30 |
| 2485–2548 | 0.00 | 0.05 | 0.16 | 0.04 | 0.25 |
| 2549–2659 | 0.00 | 0.00 | 0.03 | 0.17 | 0.20 |

Alternate form, estimated proportion consistently classified: total = 0.74; Standard Met and Exceeded = 0.89

Table 8.F. Decision Accuracy for Grade Five—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2219–2454 | 0.32 | 0.04 | 0.00 | 0.00 | 0.35 |
| 2455–2527 | 0.04 | 0.19 | 0.04 | 0.00 | 0.27 |
| 2528–2578 | 0.00 | 0.03 | 0.11 | 0.03 | 0.17 |
| 2579–2700 | 0.00 | 0.00 | 0.02 | 0.19 | 0.21 |

All-forms average, estimated proportion correctly classified: total = 0.80; Standard Met and Exceeded = 0.92

Table 8.F. Decision Consistency for Grade Five—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2219–2454 | 0.30 | 0.05 | 0.00 | 0.00 | 0.35 |
| 2455–2527 | 0.05 | 0.16 | 0.05 | 0.01 | 0.27 |
| 2528–2578 | 0.00 | 0.05 | 0.09 | 0.04 | 0.17 |
| 2579–2700 | 0.00 | 0.00 | 0.03 | 0.18 | 0.21 |

Alternate form, estimated proportion consistently classified: total = 0.73; Standard Met and Exceeded = 0.90

Table 8.F. Decision Accuracy for Grade Six—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2235–2472 | 0.31 | 0.03 | 0.00 | 0.00 | 0.34 |
| 2473–2551 | 0.04 | 0.18 | 0.04 | 0.01 | 0.27 |
| 2552–2609 | 0.00 | 0.04 | 0.12 | 0.03 | 0.19 |
| 2610–2748 | 0.00 | 0.00 | 0.02 | 0.18 | 0.20 |

All-forms average, estimated proportion correctly classified: total = 0.79; Standard Met and Exceeded = 0.91

Table 8.F. Decision Consistency for Grade Six—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2235–2472 | 0.30 | 0.04 | 0.00 | 0.00 | 0.34 |
| 2473–2551 | 0.06 | 0.15 | 0.06 | 0.01 | 0.27 |
| 2552–2609 | 0.00 | 0.05 | 0.09 | 0.04 | 0.19 |
| 2610–2748 | 0.00 | 0.00 | 0.03 | 0.17 | 0.20 |

Alternate form, estimated proportion consistently classified: total = 0.72; Standard Met and Exceeded = 0.89

Table 8.F. Decision Accuracy for Grade Seven—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2250–2483 | 0.33 | 0.03 | 0.00 | 0.00 | 0.36 |
| 2484–2566 | 0.04 | 0.17 | 0.04 | 0.00 | 0.26 |
| 2567–2634 | 0.00 | 0.04 | 0.12 | 0.03 | 0.18 |
| 2635–2778 | 0.00 | 0.00 | 0.02 | 0.17 | 0.19 |

All-forms average, estimated proportion correctly classified: total = 0.80; Standard Met and Exceeded = 0.92

Table 8.F. Decision Consistency for Grade Seven—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2250–2483 | 0.32 | 0.04 | 0.00 | 0.00 | 0.36 |
| 2484–2566 | 0.06 | 0.14 | 0.05 | 0.01 | 0.26 |
| 2567–2634 | 0.00 | 0.05 | 0.10 | 0.04 | 0.18 |
| 2635–2778 | 0.00 | 0.00 | 0.03 | 0.16 | 0.19 |

Alternate form, estimated proportion consistently classified: total = 0.73; Standard Met and Exceeded = 0.89

Table 8.F. Decision Accuracy for Grade Eight—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2265–2503 | 0.37 | 0.03 | 0.00 | 0.00 | 0.41 |
| 2504–2585 | 0.04 | 0.14 | 0.04 | 0.00 | 0.23 |
| 2586–2652 | 0.00 | 0.03 | 0.10 | 0.03 | 0.16 |
| 2653–2802 | 0.00 | 0.00 | 0.02 | 0.19 | 0.21 |

All-forms average, estimated proportion correctly classified: total = 0.80; Standard Met and Exceeded = 0.92

Table 8.F. Decision Consistency for Grade Eight—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2265–2503 | 0.36 | 0.05 | 0.00 | 0.00 | 0.41 |
| 2504–2585 | 0.05 | 0.11 | 0.05 | 0.01 | 0.23 |
| 2586–2652 | 0.00 | 0.04 | 0.08 | 0.04 | 0.16 |
| 2653–2802 | 0.00 | 0.00 | 0.03 | 0.18 | 0.21 |

Alternate form, estimated proportion consistently classified: total = 0.73; Standard Met and Exceeded = 0.90

Table 8.F. Decision Accuracy for Grade Eleven—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2280–2542 | 0.42 | 0.04 | 0.00 | 0.00 | 0.45 |
| 2543–2627 | 0.04 | 0.14 | 0.04 | 0.00 | 0.22 |
| 2628–2717 | 0.00 | 0.04 | 0.13 | 0.02 | 0.18 |
| 2718–2862 | 0.00 | 0.00 | 0.02 | 0.12 | 0.14 |

All-forms average, estimated proportion correctly classified: total = 0.80; Standard Met and Exceeded = 0.92

Table 8.F. Decision Consistency for Grade Eleven—Mathematics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Placement Score** | **Standard Not Met** | **Standard Nearly Met** | **Standard Met** | **Standard Exceeded** | **Category Total** |
| 2280–2542 | 0.40 | 0.05 | 0.00 | 0.00 | 0.45 |
| 2543–2627 | 0.06 | 0.11 | 0.05 | 0.01 | 0.22 |
| 2628–2717 | 0.00 | 0.04 | 0.10 | 0.03 | 0.18 |
| 2718–2862 | 0.00 | 0.00 | 0.03 | 0.11 | 0.14 |

Alternate form, estimated proportion consistently classified: total = 0.73; Standard Met and Exceeded = 0.90

### Appendix 8.G: Interrater Reliability

**Notes:**

The following is true for table 8.G.1 through table 8.G.14:

Numbers indicate students who received valid ratings.

Rater 2 is the backup rater.

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Three—English Language Arts/Literacy (ELA) Short Answer

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH945578 | 2 | 2,203 | 2,203 | 0.48 | 0.67 | 69.50 | 28.14 | 97.64 | 0.61 | 0.74 | 0.63 | 0.76 |
| N/A | **AVERAGE** | N/A | 2,203 | 2,203 | 0.48 | 0.67 | 69.50 | 28.14 | 97.64 | 0.61 | 0.74 | 0.63 | 0.76 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Four—ELA Short Answer

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Prompt** | **Item ID** | **Score Points** | **Rater 1 N** | **Rater 2 N** | **Kappa** | **Quadratic-Weighted Kappa** | **Percent Exact** | **Percent Adjacent** | **Percent Exact + Adjacent** | **Rater 1 Item Score Mean** | **Rater 1 Item Score SD** | **Rater 2 Item Score Mean** | **Rater 2 Item Score SD** |
| 1 | VH945438 | 2 | 1,917 | 1,917 | 0.41 | 0.61 | 62.60 | 36.05 | 98.64 | 1.13 | 0.74 | 1.16 | 0.72 |
| 2 | VH945587 | 2 | 1,937 | 1,937 | 0.43 | 0.61 | 63.91 | 34.49 | 98.40 | 1.12 | 0.72 | 1.13 | 0.73 |
| N/A | **AVERAGE** | N/A | 1,927 | 1,927 | 0.42 | 0.61 | 63.26 | 35.27 | 98.52 | 1.12 | 0.73 | 1.14 | 0.73 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Five—ELA Short Answer

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Prompt** | **Item ID** | **Score Points** | **Rater 1 N** | **Rater 2 N** | **Kappa** | **Quadratic-Weighted Kappa** | **Percent Exact** | **Percent Adjacent** | **Percent Exact + Adjacent** | **Rater 1 Item Score Mean** | **Rater 1 Item Score SD** | **Rater 2 Item Score Mean** | **Rater 2 Item Score SD** |
| 1 | VH945408 | 2 | 1,775 | 1,775 | 0.36 | 0.56 | 57.30 | 38.82 | 96.11 | 1.03 | 0.78 | 1.05 | 0.80 |
| 2 | VH945413 | 2 | 1,754 | 1,754 | 0.44 | 0.66 | 62.37 | 34.72 | 97.09 | 0.99 | 0.82 | 0.98 | 0.83 |
| 3 | VH945516 | 2 | 1,768 | 1,768 | 0.40 | 0.60 | 63.01 | 35.58 | 98.59 | 1.30 | 0.72 | 1.32 | 0.73 |
| N/A | **AVERAGE** | N/A | 1,766 | 1,766 | 0.40 | 0.61 | 60.89 | 36.37 | 97.26 | 1.11 | 0.77 | 1.12 | 0.78 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Six—ELA Short Answer

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Prompt** | **Item ID** | **Score Points** | **Rater 1 N** | **Rater 2 N** | **Kappa** | **Quadratic-Weighted Kappa** | **Percent Exact** | **Percent Adjacent** | **Percent Exact + Adjacent** | **Rater 1 Item Score Mean** | **Rater 1 Item Score SD** | **Rater 2 Item Score Mean** | **Rater 2 Item Score SD** |
| 1 | VH296196 | 2 | 3,174 | 3,174 | 0.54 | 0.71 | 74.26 | 25.74 | 100.00 | 0.54 | 0.68 | 0.52 | 0.65 |
| 2 | VH296290 | 2 | 930 | 930 | 0.46 | 0.54 | 75.59 | 24.41 | 100.00 | 0.38 | 0.54 | 0.31 | 0.49 |
| 3 | VH296308 | 2 | 503 | 503 | 0.51 | 0.65 | 71.77 | 28.23 | 100.00 | 0.61 | 0.66 | 0.59 | 0.61 |
| 4 | VH296334 | 2 | 904 | 904 | 0.48 | 0.65 | 71.35 | 28.65 | 100.00 | 0.52 | 0.64 | 0.53 | 0.64 |
| 5 | VH296341 | 2 | 925 | 925 | 0.45 | 0.64 | 67.03 | 32.97 | 100.00 | 0.74 | 0.68 | 0.73 | 0.67 |
| 6 | VH296362 | 2 | 522 | 522 | 0.51 | 0.68 | 71.26 | 28.74 | 100.00 | 0.60 | 0.68 | 0.59 | 0.65 |
| 7 | VH296363 | 2 | 2,628 | 2,628 | 0.43 | 0.57 | 69.10 | 30.90 | 100.00 | 0.56 | 0.64 | 0.51 | 0.55 |
| 8 | VH296401 | 2 | 528 | 528 | 0.49 | 0.62 | 70.83 | 29.17 | 100.00 | 0.57 | 0.62 | 0.66 | 0.61 |
| 9 | VH296422 | 2 | 612 | 612 | 0.55 | 0.63 | 75.98 | 24.02 | 100.00 | 0.61 | 0.59 | 0.61 | 0.55 |
| 10 | VH296936 | 2 | 5,860 | 5,860 | 0.70 | 0.77 | 83.31 | 16.69 | 100.00 | 0.61 | 0.61 | 0.59 | 0.59 |
| 11 | VH297062 | 2 | 134 | 134 | 0.58 | 0.63 | 82.84 | 17.16 | 100.00 | 0.28 | 0.50 | 0.29 | 0.47 |
| 12 | VH297147 | 2 | 89 | 89 | 0.35 | 0.49 | 79.78 | 20.22 | 100.00 | 0.25 | 0.46 | 0.16 | 0.42 |
| 13 | VH297172 | 2 | 74 | 74 | 0.75 | 0.83 | 85.14 | 14.86 | 100.00 | 0.69 | 0.66 | 0.59 | 0.66 |
| 14 | VH945506 | 2 | 2,326 | 2,326 | 0.44 | 0.65 | 64.70 | 35.30 | 100.00 | 0.86 | 0.74 | 0.84 | 0.68 |
| 15 | VH945511 | 2 | 2,300 | 2,300 | 0.76 | 0.91 | 87.83 | 12.17 | 100.00 | 0.56 | 0.81 | 0.54 | 0.80 |
| 16 | VH945541 | 2 | 2,326 | 2,326 | 0.39 | 0.66 | 60.36 | 39.64 | 100.00 | 1.09 | 0.77 | 1.07 | 0.76 |
| N/A | **AVERAGE** | N/A | 1,490 | 1,490 | 0.52 | 0.66 | 74.45 | 25.55 | 100.00 | 0.59 | 0.64 | 0.57 | 0.61 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Seven—ELA Short Answer

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Prompt** | **Item ID** | **Score Points** | **Rater 1 N** | **Rater 2 N** | **Kappa** | **Quadratic-Weighted Kappa** | **Percent Exact** | **Percent Adjacent** | **Percent Exact + Adjacent** | **Rater 1 Item Score Mean** | **Rater 1 Item Score SD** | **Rater 2 Item Score Mean** | **Rater 2 Item Score SD** |
| 1 | VH295371 | 2 | 1,914 | 1,914 | 0.51 | 0.59 | 77.38 | 22.62 | 100.00 | 0.37 | 0.54 | 0.35 | 0.52 |
| 2 | VH296443 | 2 | 1,531 | 1,531 | 0.38 | 0.52 | 67.80 | 32.20 | 100.00 | 0.83 | 0.58 | 0.82 | 0.59 |
| 3 | VH297497 | 2 | 519 | 519 | 0.45 | 0.56 | 70.13 | 29.87 | 100.00 | 0.53 | 0.60 | 0.57 | 0.56 |
| 4 | VH297498 | 2 | 437 | 437 | 0.49 | 0.61 | 72.08 | 27.92 | 100.00 | 0.65 | 0.59 | 0.65 | 0.60 |
| 5 | VH297569 | 2 | 442 | 442 | 0.44 | 0.60 | 69.91 | 30.09 | 100.00 | 0.51 | 0.63 | 0.48 | 0.59 |
| 6 | VH297745 | 2 | 499 | 499 | 0.64 | 0.73 | 79.76 | 20.24 | 100.00 | 0.68 | 0.62 | 0.61 | 0.60 |
| 7 | VH297780 | 2 | 778 | 778 | 0.54 | 0.72 | 71.34 | 28.66 | 100.00 | 0.83 | 0.71 | 0.85 | 0.72 |
| 8 | VH297843 | 2 | 2,525 | 2,525 | 0.44 | 0.60 | 67.92 | 32.08 | 100.00 | 0.67 | 0.66 | 0.65 | 0.60 |
| 9 | VH298062 | 2 | 109 | 109 | 0.62 | 0.68 | 81.65 | 18.35 | 100.00 | 0.41 | 0.55 | 0.38 | 0.52 |
| 10 | VH945433 | 2 | 1,887 | 1,887 | 0.64 | 0.84 | 77.48 | 22.52 | 100.00 | 0.73 | 0.83 | 0.75 | 0.84 |
| 11 | VH945458 | 2 | 1,888 | 1,888 | 0.50 | 0.74 | 66.90 | 33.10 | 100.00 | 0.89 | 0.80 | 0.86 | 0.78 |
| 12 | VH945572 | 2 | 1,856 | 1,856 | 0.49 | 0.74 | 66.65 | 33.35 | 100.00 | 0.85 | 0.80 | 0.81 | 0.80 |
| N/A | **AVERAGE** | N/A | 1,199 | 1,199 | 0.51 | 0.66 | 72.42 | 27.58 | 100.00 | 0.66 | 0.66 | 0.65 | 0.64 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Eight—ELA Short Answer

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Prompt** | **Item ID** | **Score Points** | **Rater 1 N** | **Rater 2 N** | **Kappa** | **Quadratic Weighted Kappa** | **Percent Exact** | **Percent Adjacent** | **Percent Exact + Adjacent** | **Rater 1 Item Score Mean** | **Rater 1 Item Score SD** | **Rater 2 Item Score Mean** | **Rater 2 Item Score SD** |
| 1 | VH279694 | 2 | 422 | 422 | 0.57 | 0.68 | 81.52 | 18.48 | 100.00 | 0.34 | 0.56 | 0.31 | 0.52 |
| 2 | VH279901 | 2 | 266 | 266 | 0.61 | 0.66 | 80.45 | 19.55 | 100.00 | 0.71 | 0.55 | 0.67 | 0.52 |
| 3 | VH279904 | 2 | 743 | 743 | 0.41 | 0.59 | 65.81 | 34.19 | 100.00 | 0.64 | 0.68 | 0.61 | 0.61 |
| 4 | VH279941 | 2 | 384 | 384 | 0.54 | 0.71 | 72.14 | 27.86 | 100.00 | 0.65 | 0.67 | 0.70 | 0.71 |
| 5 | VH280258 | 2 | 1,333 | 1,333 | 0.53 | 0.63 | 74.64 | 25.36 | 100.00 | 0.59 | 0.59 | 0.63 | 0.58 |
| 6 | VH280491 | 2 | 214 | 214 | 0.74 | 0.81 | 85.05 | 14.95 | 100.00 | 0.64 | 0.63 | 0.71 | 0.63 |
| 7 | VH280503 | 2 | 5,633 | 5,633 | 0.51 | 0.62 | 83.21 | 16.79 | 100.00 | 0.24 | 0.47 | 0.23 | 0.47 |
| 8 | VH280521 | 2 | 2,794 | 2,794 | 0.57 | 0.78 | 71.58 | 28.42 | 100.00 | 0.94 | 0.80 | 0.94 | 0.79 |
| 9 | VH280622 | 2 | 241 | 241 | 0.43 | 0.58 | 67.63 | 32.37 | 100.00 | 0.61 | 0.64 | 0.63 | 0.61 |
| 10 | VH280847 | 2 | 1,151 | 1,151 | 0.44 | 0.55 | 69.16 | 30.84 | 100.00 | 0.60 | 0.61 | 0.54 | 0.56 |
| 11 | VH281281 | 2 | 434 | 434 | 0.61 | 0.71 | 77.88 | 22.12 | 100.00 | 0.68 | 0.61 | 0.67 | 0.62 |
| 12 | VH281583 | 2 | 94 | 94 | 0.74 | 0.79 | 86.17 | 13.83 | 100.00 | 0.47 | 0.58 | 0.48 | 0.58 |
| 13 | VH281643 | 2 | 143 | 143 | 0.57 | 0.67 | 88.11 | 11.89 | 100.00 | 0.19 | 0.44 | 0.17 | 0.41 |
| 14 | VH295517 | 2 | 1,806 | 1,806 | 0.58 | 0.65 | 77.52 | 22.48 | 100.00 | 0.55 | 0.58 | 0.50 | 0.55 |
| 15 | VH295622 | 2 | 1,787 | 1,787 | 0.41 | 0.61 | 69.89 | 30.11 | 100.00 | 0.51 | 0.66 | 0.37 | 0.56 |
| 16 | VH945496 | 2 | 1,785 | 1,785 | 0.53 | 0.76 | 68.46 | 31.54 | 100.00 | 1.02 | 0.81 | 0.96 | 0.80 |
| N/A | **AVERAGE** | N/A | 1,202 | 1,202 | 0.55 | 0.67 | 76.20 | 23.80 | 100.00 | 0.59 | 0.62 | 0.57 | 0.59 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Eleven—ELA Short Answer

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH289614 | 2 | 726 | 726 | 0.33 | 0.52 | 57.71 | 39.81 | 97.52 | 0.98 | 0.72 | 0.98 | 0.72 |
| 2 | VH289740 | 2 | 136 | 136 | 0.27 | 0.44 | 52.21 | 42.65 | 94.85 | 0.99 | 0.74 | 0.99 | 0.77 |
| 3 | VH289859 | 2 | 733 | 733 | 0.38 | 0.58 | 60.71 | 37.93 | 98.64 | 0.97 | 0.72 | 0.96 | 0.73 |
| 4 | VH289908 | 2 | 250 | 250 | 0.33 | 0.50 | 57.60 | 37.20 | 94.80 | 0.77 | 0.75 | 0.73 | 0.77 |
| 5 | VH290189 | 2 | 727 | 727 | 0.42 | 0.57 | 63.96 | 33.70 | 97.66 | 0.86 | 0.71 | 0.83 | 0.70 |
| 6 | VH290291 | 2 | 821 | 821 | 0.55 | 0.71 | 73.45 | 24.36 | 97.81 | 0.62 | 0.75 | 0.62 | 0.76 |
| 7 | VH290296 | 2 | 954 | 954 | 0.57 | 0.76 | 71.80 | 27.57 | 99.37 | 0.98 | 0.79 | 0.95 | 0.79 |
| 8 | VH290304 | 2 | 53 | 53 | 0.51 | 0.68 | 67.92 | 30.19 | 98.11 | 0.96 | 0.76 | 0.92 | 0.78 |
| 9 | VH290305 | 2 | 711 | 711 | 0.37 | 0.54 | 60.34 | 36.99 | 97.33 | 0.92 | 0.73 | 0.91 | 0.72 |
| 10 | VH290311 | 2 | 828 | 828 | 0.41 | 0.60 | 62.92 | 35.27 | 98.19 | 0.80 | 0.73 | 0.77 | 0.73 |
| 11 | VH290312 | 2 | 1,121 | 1,121 | 0.44 | 0.60 | 66.55 | 31.13 | 97.68 | 0.62 | 0.70 | 0.63 | 0.72 |
| 12 | VH290314 | 2 | 855 | 855 | 0.53 | 0.73 | 69.24 | 30.41 | 99.65 | 1.14 | 0.77 | 1.12 | 0.77 |
| 13 | VH290372 | 2 | 135 | 135 | 0.42 | 0.59 | 62.96 | 34.81 | 97.78 | 0.93 | 0.75 | 0.88 | 0.72 |
| 14 | VH290515 | 2 | 727 | 727 | 0.45 | 0.62 | 65.47 | 33.01 | 98.49 | 0.81 | 0.72 | 0.81 | 0.72 |
| 15 | VH290571 | 2 | 684 | 684 | 0.44 | 0.60 | 64.04 | 33.48 | 97.51 | 0.93 | 0.73 | 0.94 | 0.73 |
| 16 | VH290629 | 2 | 945 | 945 | 0.38 | 0.55 | 61.16 | 35.24 | 96.40 | 0.70 | 0.75 | 0.73 | 0.74 |
| 17 | VH290631 | 2 | 759 | 759 | 0.46 | 0.63 | 65.09 | 33.20 | 98.29 | 1.04 | 0.73 | 1.02 | 0.75 |
| 18 | VH290839 | 2 | 763 | 763 | 0.50 | 0.70 | 67.10 | 31.45 | 98.56 | 0.95 | 0.78 | 0.94 | 0.78 |
| 19 | VH290895 | 2 | 250 | 250 | 0.37 | 0.52 | 60.80 | 34.40 | 95.20 | 0.68 | 0.73 | 0.74 | 0.75 |
| 20 | VH290919 | 2 | 35 | 35 | 0.43 | 0.62 | 65.71 | 34.29 | 100.00 | 0.97 | 0.66 | 0.97 | 0.71 |
| 21 | VH291246 | 2 | 389 | 389 | 0.48 | 0.65 | 67.87 | 30.08 | 97.94 | 0.63 | 0.74 | 0.71 | 0.75 |
| 22 | VH291428 | 2 | 42 | 42 | 0.37 | 0.57 | 59.52 | 38.10 | 97.62 | 0.83 | 0.76 | 0.79 | 0.75 |
| 23 | VH291651 | 2 | 112 | 112 | 0.39 | 0.45 | 61.61 | 33.04 | 94.64 | 0.92 | 0.74 | 0.89 | 0.68 |
| 24 | VH292409 | 2 | 187 | 187 | 0.56 | 0.76 | 71.66 | 28.34 | 100.00 | 0.81 | 0.77 | 0.81 | 0.79 |
| 25 | VH293122 | 2 | 53 | 53 | 0.60 | 0.72 | 75.47 | 22.64 | 98.11 | 0.66 | 0.76 | 0.66 | 0.73 |
| 26 | VH293193 | 2 | 42 | 42 | 0.60 | 0.77 | 73.81 | 26.19 | 100.00 | 0.93 | 0.75 | 1.00 | 0.77 |
| 27 | VH293817 | 2 | 149 | 149 | 0.45 | 0.65 | 66.44 | 32.21 | 98.66 | 0.64 | 0.74 | 0.66 | 0.73 |
| 28 | VH294117 | 2 | 47 | 47 | 0.20 | 0.37 | 51.06 | 42.55 | 93.62 | 1.34 | 0.73 | 1.30 | 0.75 |
| 29 | VH295362 | 2 | 1,508 | 1,508 | 0.47 | 0.64 | 64.99 | 32.10 | 97.08 | 1.10 | 0.78 | 1.12 | 0.77 |
| 30 | VH295390 | 2 | 39 | 39 | 0.62 | 0.81 | 82.05 | 17.95 | 100.00 | 1.62 | 0.67 | 1.54 | 0.72 |
| 31 | VH295538 | 2 | 39 | 39 | 0.56 | 0.76 | 71.79 | 28.21 | 100.00 | 1.23 | 0.81 | 1.21 | 0.73 |
| 32 | VH295802 | 2 | 58 | 58 | 0.17 | 0.46 | 50.00 | 50.00 | 100.00 | 1.38 | 0.64 | 1.29 | 0.73 |
| 33 | VH295988 | 2 | 66 | 66 | 0.41 | 0.58 | 66.67 | 33.33 | 100.00 | 1.47 | 0.61 | 1.41 | 0.66 |
| 34 | VH296003 | 2 | 49 | 49 | 0.52 | 0.68 | 71.43 | 26.53 | 97.96 | 1.35 | 0.75 | 1.41 | 0.73 |
| 35 | VH648736 | 2 | 371 | 371 | 0.34 | 0.55 | 57.95 | 40.16 | 98.11 | 0.89 | 0.72 | 0.90 | 0.74 |
| 36 | VH945418 | 2 | 1,505 | 1,505 | 0.54 | 0.73 | 70.63 | 27.91 | 98.54 | 1.26 | 0.79 | 1.24 | 0.79 |
| 37 | VH945468 | 2 | 1,519 | 1,519 | 0.43 | 0.64 | 63.59 | 34.50 | 98.09 | 1.19 | 0.77 | 1.22 | 0.76 |
| 38 | VH945521 | 2 | 1,509 | 1,509 | 0.44 | 0.66 | 63.29 | 35.19 | 98.48 | 1.05 | 0.78 | 1.04 | 0.77 |
| 39 | VH945536 | 2 | 1,508 | 1,508 | 0.46 | 0.64 | 63.93 | 32.82 | 96.75 | 1.08 | 0.80 | 1.06 | 0.80 |
| N/A | **AVERAGE** | N/A | 549 | 549 | 0.44 | 0.62 | 64.88 | 33.05 | 97.93 | 0.97 | 0.74 | 0.97 | 0.74 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Three—Mathematics Short Answer

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH299059 | 3 | 1,017 | 1,017 | 0.93 | 0.98 | 94.89 | 5.11 | 100.00 | 1.40 | 1.19 | 1.40 | 1.19 |
| 2 | VH299061 | 1 | 1,994 | 1,994 | 0.86 | 0.86 | 94.03 | 5.97 | 100.00 | 0.30 | 0.46 | 0.29 | 0.46 |
| 3 | VH299298 | 2 | 1,815 | 1,815 | 0.77 | 0.91 | 90.30 | 9.70 | 100.00 | 0.42 | 0.75 | 0.40 | 0.73 |
| 4 | VH299352 | 2 | 55 | 55 | 0.87 | 0.95 | 94.55 | 5.45 | 100.00 | 0.44 | 0.76 | 0.42 | 0.76 |
| 5 | VH299378 | 2 | 48 | 48 | 0.95 | 0.98 | 97.92 | 2.08 | 100.00 | 0.38 | 0.70 | 0.35 | 0.70 |
| 6 | VH299379 | 3 | 1,202 | 1,202 | 0.92 | 0.98 | 94.09 | 5.91 | 100.00 | 1.34 | 1.20 | 1.36 | 1.21 |
| 7 | VH299380 | 1 | 49 | 49 | 0.83 | 0.83 | 91.84 | 8.16 | 100.00 | 0.43 | 0.50 | 0.39 | 0.49 |
| 8 | VH299381 | 2 | 47 | 47 | 0.70 | 0.87 | 89.36 | 10.64 | 100.00 | 0.34 | 0.67 | 0.28 | 0.62 |
| 9 | VH299420 | 2 | 1,826 | 1,826 | 0.79 | 0.92 | 88.01 | 11.99 | 100.00 | 0.73 | 0.88 | 0.73 | 0.88 |
| 10 | VH299470 | 2 | 1,814 | 1,814 | 0.81 | 0.93 | 89.58 | 10.42 | 100.00 | 0.68 | 0.89 | 0.68 | 0.87 |
| 11 | VH299544 | 1 | 59 | 59 | 0.96 | 0.96 | 98.31 | 1.69 | 100.00 | 0.36 | 0.48 | 0.34 | 0.48 |
| 12 | VH299548 | 2 | 357 | 357 | 0.95 | 0.98 | 98.32 | 1.68 | 100.00 | 0.28 | 0.61 | 0.29 | 0.62 |
| 13 | VH299549 | 1 | 2,634 | 2,634 | 0.77 | 0.77 | 92.52 | 7.48 | 100.00 | 0.22 | 0.41 | 0.19 | 0.39 |
| 14 | VH299560 | 2 | 52 | 52 | 0.96 | 0.99 | 98.08 | 1.92 | 100.00 | 0.58 | 0.89 | 0.56 | 0.89 |
| 15 | VH299561 | 2 | 891 | 891 | 0.95 | 0.98 | 99.44 | 0.56 | 100.00 | 0.08 | 0.35 | 0.08 | 0.35 |
| 16 | VH299632 | 2 | 56 | 56 | 0.90 | 0.94 | 94.64 | 5.36 | 100.00 | 0.54 | 0.69 | 0.52 | 0.66 |
| 17 | VH299646 | 2 | 2,536 | 2,536 | 0.92 | 0.97 | 95.54 | 4.46 | 100.00 | 0.69 | 0.88 | 0.69 | 0.89 |
| 18 | VH299647 | 2 | 2,495 | 2,495 | 0.77 | 0.87 | 89.66 | 10.34 | 100.00 | 0.38 | 0.63 | 0.36 | 0.62 |
| 19 | VH299783 | 2 | 2,487 | 2,487 | 0.91 | 0.97 | 95.17 | 4.83 | 100.00 | 0.66 | 0.86 | 0.65 | 0.86 |
| 20 | VH299784 | 2 | 2,449 | 2,449 | 0.78 | 0.88 | 89.83 | 10.17 | 100.00 | 0.39 | 0.63 | 0.39 | 0.65 |
| 21 | VH299999 | 3 | 1,038 | 1,038 | 0.95 | 0.99 | 96.53 | 3.47 | 100.00 | 1.18 | 1.18 | 1.18 | 1.18 |
| 22 | VH300001 | 1 | 1,975 | 1,975 | 0.84 | 0.84 | 92.96 | 7.04 | 100.00 | 0.33 | 0.47 | 0.33 | 0.47 |
| 23 | VH300064 | 2 | 1,842 | 1,842 | 0.80 | 0.93 | 91.80 | 8.20 | 100.00 | 0.42 | 0.75 | 0.41 | 0.74 |
| 24 | VH300360 | 2 | 53 | 53 | 0.88 | 0.96 | 94.34 | 5.66 | 100.00 | 0.55 | 0.85 | 0.49 | 0.80 |
| 25 | VH300362 | 3 | 1,147 | 1,147 | 0.92 | 0.98 | 94.33 | 5.67 | 100.00 | 1.33 | 1.16 | 1.34 | 1.17 |
| 26 | VH300364 | 1 | 52 | 52 | 0.63 | 0.63 | 82.69 | 17.31 | 100.00 | 0.37 | 0.49 | 0.38 | 0.49 |
| 27 | VH300365 | 2 | 51 | 51 | 0.68 | 0.77 | 84.31 | 15.69 | 100.00 | 0.41 | 0.61 | 0.41 | 0.57 |
| 28 | VH945769 | 2 | 1,996 | 1,996 | 0.89 | 0.96 | 93.74 | 6.26 | 100.00 | 0.83 | 0.91 | 0.82 | 0.92 |
| 29 | VH945771 | 3 | 2,048 | 2,048 | 0.85 | 0.95 | 89.65 | 10.35 | 100.00 | 0.91 | 0.99 | 0.90 | 1.00 |
| 30 | VH945776 | 2 | 1,956 | 1,956 | 0.90 | 0.97 | 94.12 | 5.88 | 100.00 | 0.92 | 0.93 | 0.92 | 0.94 |
| 31 | VH945777 | 3 | 1,989 | 1,989 | 0.82 | 0.94 | 88.13 | 11.87 | 100.00 | 0.90 | 0.97 | 0.91 | 0.97 |
| 32 | VH945866 | 2 | 1,807 | 1,807 | 0.88 | 0.96 | 93.36 | 6.64 | 100.00 | 0.82 | 0.94 | 0.82 | 0.95 |
| 33 | VH945870 | 2 | 663 | 663 | 0.97 | 0.98 | 98.04 | 1.96 | 100.00 | 0.57 | 0.71 | 0.57 | 0.72 |
| 34 | VH945872 | 2 | 1,783 | 1,783 | 0.87 | 0.96 | 92.99 | 7.01 | 100.00 | 0.72 | 0.92 | 0.73 | 0.93 |
| N/A | **AVERAGE** | N/A | 1,244 | 1,244 | 0.86 | 0.92 | 93.03 | 6.97 | 100.00 | 0.61 | 0.77 | 0.61 | 0.77 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Four—Mathematics Short Answer

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH299103 | 2 | 1,687 | 1,687 | 0.72 | 0.86 | 88.26 | 11.74 | 100.00 | 0.37 | 0.66 | 0.35 | 0.64 |
| 2 | VH299105 | 2 | 1,685 | 1,685 | 0.50 | 0.69 | 92.64 | 7.36 | 100.00 | 0.09 | 0.35 | 0.09 | 0.34 |
| 3 | VH299107 | 3 | 1,694 | 1,694 | 0.82 | 0.94 | 87.31 | 12.69 | 100.00 | 0.99 | 1.04 | 0.97 | 1.02 |
| 4 | VH299112 | 2 | 1,683 | 1,683 | 0.84 | 0.92 | 92.93 | 7.07 | 100.00 | 0.39 | 0.66 | 0.38 | 0.64 |
| 5 | VH299113 | 2 | 1,474 | 1,474 | 0.69 | 0.86 | 83.65 | 16.35 | 100.00 | 0.57 | 0.77 | 0.50 | 0.74 |
| 6 | VH299115 | 2 | 1,505 | 1,505 | 0.68 | 0.84 | 87.71 | 12.29 | 100.00 | 0.34 | 0.63 | 0.31 | 0.62 |
| 7 | VH299181 | 2 | 1,684 | 1,684 | 0.67 | 0.85 | 80.64 | 19.36 | 100.00 | 0.61 | 0.79 | 0.63 | 0.80 |
| 8 | VH299339 | 2 | 1,691 | 1,691 | 0.68 | 0.87 | 87.88 | 12.12 | 100.00 | 0.34 | 0.67 | 0.34 | 0.67 |
| 9 | VH299340 | 2 | 1,693 | 1,693 | 0.80 | 0.93 | 90.67 | 9.33 | 100.00 | 0.51 | 0.81 | 0.51 | 0.81 |
| 10 | VH299342 | 3 | 1,687 | 1,687 | 0.83 | 0.94 | 87.85 | 12.15 | 100.00 | 1.09 | 1.04 | 1.07 | 1.02 |
| 11 | VH299402 | 2 | 1,758 | 1,758 | 0.96 | 0.99 | 99.15 | 0.85 | 100.00 | 0.19 | 0.56 | 0.19 | 0.56 |
| 12 | VH299405 | 2 | 1,724 | 1,724 | 0.83 | 0.95 | 91.65 | 8.35 | 100.00 | 0.63 | 0.88 | 0.63 | 0.90 |
| 13 | VH299445 | 2 | 1,705 | 1,705 | 0.69 | 0.87 | 86.39 | 13.61 | 100.00 | 0.44 | 0.74 | 0.40 | 0.72 |
| 14 | VH299446 | 2 | 1,707 | 1,707 | 0.91 | 0.97 | 96.37 | 3.63 | 100.00 | 0.42 | 0.77 | 0.42 | 0.78 |
| 15 | VH299448 | 3 | 1,706 | 1,706 | 0.84 | 0.95 | 88.39 | 11.61 | 100.00 | 1.13 | 1.10 | 1.12 | 1.08 |
| 16 | VH299474 | 1 | 1,575 | 1,575 | 0.53 | 0.53 | 82.22 | 17.78 | 100.00 | 0.28 | 0.45 | 0.22 | 0.42 |
| 17 | VH299476 | 1 | 1,533 | 1,533 | 0.47 | 0.47 | 79.00 | 21.00 | 100.00 | 0.32 | 0.46 | 0.22 | 0.41 |
| 18 | VH299477 | 2 | 529 | 529 | 0.68 | 0.82 | 84.31 | 15.69 | 100.00 | 0.42 | 0.66 | 0.43 | 0.66 |
| 19 | VH299504 | 1 | 1,606 | 1,606 | 0.65 | 0.65 | 84.43 | 15.57 | 100.00 | 0.35 | 0.48 | 0.32 | 0.47 |
| 20 | VH299512 | 2 | 1,674 | 1,674 | 0.85 | 0.94 | 92.77 | 7.23 | 100.00 | 0.52 | 0.80 | 0.50 | 0.79 |
| 21 | VH299776 | 2 | 1,625 | 1,625 | 0.80 | 0.91 | 87.38 | 12.62 | 100.00 | 0.73 | 0.82 | 0.75 | 0.82 |
| 22 | VH300007 | 2 | 1,702 | 1,702 | 0.96 | 0.98 | 98.88 | 1.12 | 100.00 | 0.24 | 0.61 | 0.24 | 0.61 |
| 23 | VH300009 | 2 | 1,663 | 1,663 | 0.83 | 0.95 | 91.10 | 8.90 | 100.00 | 0.76 | 0.93 | 0.74 | 0.94 |
| 24 | VH300038 | 2 | 1,710 | 1,710 | 0.58 | 0.73 | 77.60 | 22.40 | 100.00 | 0.48 | 0.65 | 0.48 | 0.64 |
| 25 | VH300096 | 1 | 1,565 | 1,565 | 0.54 | 0.54 | 82.62 | 17.38 | 100.00 | 0.28 | 0.45 | 0.23 | 0.42 |
| 26 | VH300098 | 1 | 1,532 | 1,532 | 0.48 | 0.48 | 78.98 | 21.02 | 100.00 | 0.33 | 0.47 | 0.23 | 0.42 |
| 27 | VH300099 | 2 | 490 | 490 | 0.75 | 0.87 | 89.80 | 10.20 | 100.00 | 0.33 | 0.62 | 0.36 | 0.63 |
| 28 | VH300188 | 2 | 1,532 | 1,532 | 0.58 | 0.77 | 80.48 | 19.52 | 100.00 | 0.42 | 0.66 | 0.38 | 0.64 |
| 29 | VH300210 | 2 | 1,682 | 1,682 | 0.69 | 0.84 | 89.89 | 10.11 | 100.00 | 0.27 | 0.57 | 0.25 | 0.55 |
| 30 | VH300211 | 2 | 1,680 | 1,680 | 0.55 | 0.73 | 94.58 | 5.42 | 100.00 | 0.08 | 0.32 | 0.07 | 0.31 |
| 31 | VH300213 | 3 | 1,694 | 1,694 | 0.81 | 0.94 | 88.31 | 11.69 | 100.00 | 0.74 | 0.97 | 0.70 | 0.94 |
| 32 | VH300217 | 1 | 1,616 | 1,616 | 0.62 | 0.62 | 82.92 | 17.08 | 100.00 | 0.35 | 0.48 | 0.35 | 0.48 |
| 33 | VH300288 | 2 | 1,716 | 1,716 | 0.82 | 0.90 | 91.84 | 8.16 | 100.00 | 0.39 | 0.66 | 0.38 | 0.65 |
| 34 | VH300290 | 2 | 1,517 | 1,517 | 0.75 | 0.88 | 85.70 | 14.30 | 100.00 | 0.62 | 0.78 | 0.56 | 0.76 |
| 35 | VH945820 | 1 | 1,618 | 1,618 | 0.82 | 0.82 | 92.34 | 7.66 | 100.00 | 0.34 | 0.47 | 0.30 | 0.46 |
| 36 | VH945821 | 2 | 1,613 | 1,613 | 0.63 | 0.85 | 86.05 | 13.95 | 100.00 | 0.35 | 0.68 | 0.35 | 0.68 |
| 37 | VH945823 | 2 | 1,610 | 1,610 | 0.69 | 0.84 | 83.17 | 16.83 | 100.00 | 0.52 | 0.74 | 0.54 | 0.73 |
| 38 | VH945833 | 1 | 1,678 | 1,678 | 0.58 | 0.58 | 87.31 | 12.69 | 100.00 | 0.20 | 0.40 | 0.17 | 0.37 |
| 39 | VH945835 | 2 | 1,725 | 1,725 | 0.68 | 0.86 | 79.71 | 20.29 | 100.00 | 0.83 | 0.86 | 0.83 | 0.86 |
| 40 | VH945840 | 1 | 1,736 | 1,736 | 0.87 | 0.87 | 94.01 | 5.99 | 100.00 | 0.62 | 0.49 | 0.61 | 0.49 |
| 41 | VH945841 | 2 | 1,714 | 1,714 | 0.67 | 0.85 | 81.39 | 18.61 | 100.00 | 0.60 | 0.81 | 0.61 | 0.79 |
| 42 | VH945876 | 2 | 1,732 | 1,732 | 0.80 | 0.93 | 88.34 | 11.66 | 100.00 | 1.09 | 0.94 | 1.07 | 0.94 |
| 43 | VH945878 | 2 | 1,725 | 1,725 | 0.77 | 0.90 | 91.13 | 8.87 | 100.00 | 0.35 | 0.68 | 0.34 | 0.68 |
| N/A | **AVERAGE** | N/A | 1,602 | 1,602 | 0.72 | 0.83 | 87.62 | 12.38 | 100.00 | 0.49 | 0.68 | 0.47 | 0.67 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Five—Mathematics Short Answer

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH299043 | 2 | 1,798 | 1,798 | 0.88 | 0.94 | 95.44 | 4.56 | 100.00 | 0.32 | 0.64 | 0.32 | 0.64 |
| 2 | VH299044 | 2 | 1,875 | 1,875 | 0.61 | 0.79 | 89.97 | 10.03 | 100.00 | 0.20 | 0.51 | 0.18 | 0.46 |
| 3 | VH299045 | 2 | 1,877 | 1,877 | 0.83 | 0.93 | 94.35 | 5.65 | 100.00 | 0.28 | 0.61 | 0.28 | 0.61 |
| 4 | VH299046 | 2 | 1,854 | 1,854 | 0.90 | 0.97 | 95.63 | 4.37 | 100.00 | 0.58 | 0.87 | 0.59 | 0.89 |
| 5 | VH299082 | 2 | 2,222 | 2,222 | 0.59 | 0.71 | 83.66 | 16.34 | 100.00 | 0.28 | 0.54 | 0.30 | 0.52 |
| 6 | VH299143 | 2 | 1,758 | 1,758 | 0.89 | 0.96 | 95.90 | 4.10 | 100.00 | 0.36 | 0.69 | 0.36 | 0.70 |
| 7 | VH299151 | 2 | 1,797 | 1,797 | 0.66 | 0.83 | 90.37 | 9.63 | 100.00 | 0.24 | 0.56 | 0.20 | 0.51 |
| 8 | VH299164 | 2 | 1,815 | 1,815 | 0.86 | 0.94 | 94.99 | 5.01 | 100.00 | 0.32 | 0.65 | 0.31 | 0.65 |
| 9 | VH299169 | 2 | 1,773 | 1,773 | 0.89 | 0.97 | 94.64 | 5.36 | 100.00 | 0.62 | 0.89 | 0.64 | 0.90 |
| 10 | VH299188 | 3 | 851 | 851 | 0.98 | 0.98 | 99.29 | 0.71 | 100.00 | 0.22 | 0.48 | 0.22 | 0.49 |
| 11 | VH299190 | 2 | 1,841 | 1,841 | 0.63 | 0.63 | 82.51 | 17.49 | 100.00 | 0.39 | 0.49 | 0.35 | 0.48 |
| 12 | VH299411 | 2 | 1,741 | 1,741 | 0.45 | 0.57 | 83.29 | 16.71 | 100.00 | 0.23 | 0.47 | 0.17 | 0.40 |
| 13 | VH299412 | 3 | 1,722 | 1,722 | 0.57 | 0.87 | 83.28 | 16.72 | 100.00 | 0.42 | 0.82 | 0.38 | 0.81 |
| 14 | VH299595 | 2 | 41 | 41 | 0.72 | 0.90 | 92.68 | 7.32 | 100.00 | 0.27 | 0.63 | 0.20 | 0.56 |
| 15 | VH299597 | 2 | 2,366 | 2,366 | 0.59 | 0.80 | 85.84 | 14.16 | 100.00 | 0.27 | 0.59 | 0.29 | 0.59 |
| 16 | VH299601 | 3 | 40 | 40 | 0.80 | 0.96 | 92.50 | 7.50 | 100.00 | 0.50 | 1.01 | 0.48 | 0.99 |
| 17 | VH299680 | 1 | 39 | 39 | 0.00 | 0.00 | 94.87 | 5.13 | 100.00 | 0.05 | 0.22 | 0.00 | 0.00 |
| 18 | VH299683 | 2 | 38 | 38 | 0.61 | 0.82 | 81.58 | 18.42 | 100.00 | 0.47 | 0.73 | 0.39 | 0.72 |
| 19 | VH299685 | 2 | 39 | 39 | 0.78 | 0.88 | 92.31 | 7.69 | 100.00 | 0.28 | 0.60 | 0.26 | 0.55 |
| 20 | VH299687 | 3 | 1,749 | 1,749 | 0.53 | 0.76 | 91.54 | 8.46 | 100.00 | 0.15 | 0.45 | 0.11 | 0.39 |
| 21 | VH299695 | 2 | 1,714 | 1,714 | 0.85 | 0.93 | 93.52 | 6.48 | 100.00 | 0.38 | 0.66 | 0.37 | 0.65 |
| 22 | VH299696 | 2 | 1,758 | 1,758 | 0.63 | 0.82 | 90.50 | 9.50 | 100.00 | 0.21 | 0.53 | 0.18 | 0.49 |
| 23 | VH299697 | 2 | 1,766 | 1,766 | 0.82 | 0.91 | 93.15 | 6.85 | 100.00 | 0.32 | 0.63 | 0.32 | 0.63 |
| 24 | VH299699 | 2 | 1,732 | 1,732 | 0.89 | 0.97 | 94.80 | 5.20 | 100.00 | 0.61 | 0.88 | 0.62 | 0.90 |
| 25 | VH299855 | 2 | 41 | 41 | -0.02 | -0.02 | 95.12 | 4.88 | 100.00 | 0.02 | 0.16 | 0.02 | 0.16 |
| 26 | VH299857 | 2 | 40 | 40 | 0.62 | 0.83 | 85.00 | 15.00 | 100.00 | 0.38 | 0.67 | 0.33 | 0.69 |
| 27 | VH299860 | 1 | 40 | 40 | 0.86 | 0.86 | 95.00 | 5.00 | 100.00 | 0.23 | 0.42 | 0.23 | 0.42 |
| 28 | VH299861 | 2 | 1,958 | 1,958 | 0.90 | 0.96 | 95.05 | 4.95 | 100.00 | 0.51 | 0.79 | 0.52 | 0.80 |
| 29 | VH299884 | 2 | 41 | 41 | 0.77 | 0.89 | 90.24 | 9.76 | 100.00 | 0.32 | 0.65 | 0.41 | 0.71 |
| 30 | VH299887 | 2 | 2,267 | 2,267 | 0.64 | 0.84 | 88.58 | 11.42 | 100.00 | 0.25 | 0.59 | 0.27 | 0.59 |
| 31 | VH299891 | 3 | 2,217 | 2,217 | 0.64 | 0.88 | 84.71 | 15.29 | 100.00 | 0.41 | 0.80 | 0.41 | 0.78 |
| 32 | VH299987 | 2 | 1,736 | 1,736 | 0.43 | 0.57 | 82.26 | 17.74 | 100.00 | 0.24 | 0.49 | 0.18 | 0.42 |
| 33 | VH299989 | 3 | 1,715 | 1,715 | 0.56 | 0.87 | 84.31 | 15.69 | 100.00 | 0.37 | 0.78 | 0.34 | 0.78 |
| 34 | VH299995 | 2 | 1,819 | 1,819 | 0.82 | 0.88 | 89.17 | 10.83 | 100.00 | 0.80 | 0.69 | 0.80 | 0.68 |
| 35 | VH300078 | 2 | 2,204 | 2,204 | 0.57 | 0.70 | 82.49 | 17.51 | 100.00 | 0.29 | 0.54 | 0.31 | 0.54 |
| 36 | VH300306 | 2 | 1,719 | 1,719 | 0.80 | 0.90 | 92.38 | 7.62 | 100.00 | 0.33 | 0.64 | 0.32 | 0.62 |
| 37 | VH300307 | 2 | 1,771 | 1,771 | 0.65 | 0.79 | 89.95 | 10.05 | 100.00 | 0.22 | 0.51 | 0.19 | 0.47 |
| 38 | VH300308 | 2 | 1,764 | 1,764 | 0.82 | 0.90 | 93.20 | 6.80 | 100.00 | 0.29 | 0.59 | 0.29 | 0.58 |
| 39 | VH300309 | 2 | 1,745 | 1,745 | 0.89 | 0.97 | 94.61 | 5.39 | 100.00 | 0.63 | 0.89 | 0.64 | 0.90 |
| 40 | VH945787 | 2 | 1,873 | 1,873 | 0.75 | 0.90 | 85.85 | 14.15 | 100.00 | 0.67 | 0.85 | 0.70 | 0.87 |
| 41 | VH945788 | 2 | 1,899 | 1,899 | 0.81 | 0.90 | 88.73 | 11.27 | 100.00 | 0.65 | 0.77 | 0.64 | 0.74 |
| 42 | VH945807 | 2 | 2,058 | 2,058 | 0.64 | 0.83 | 78.23 | 21.77 | 100.00 | 0.67 | 0.81 | 0.68 | 0.81 |
| 43 | VH945808 | 1 | 2,046 | 2,046 | 0.63 | 0.63 | 89.78 | 10.22 | 100.00 | 0.17 | 0.38 | 0.16 | 0.37 |
| 44 | VH945809 | 2 | 802 | 802 | 0.80 | 0.85 | 95.26 | 4.74 | 100.00 | 0.15 | 0.40 | 0.15 | 0.40 |
| 45 | VH945827 | 2 | 2,075 | 2,075 | 0.80 | 0.93 | 87.71 | 12.29 | 100.00 | 0.96 | 0.92 | 0.97 | 0.92 |
| 46 | VH945828 | 2 | 2,057 | 2,057 | 0.82 | 0.94 | 90.23 | 9.77 | 100.00 | 0.66 | 0.88 | 0.67 | 0.88 |
| 47 | VH945829 | 2 | 2,054 | 2,054 | 0.79 | 0.92 | 87.44 | 12.56 | 100.00 | 0.76 | 0.87 | 0.76 | 0.88 |
| 48 | VH945852 | 2 | 2,127 | 2,127 | 0.80 | 0.92 | 87.12 | 12.88 | 100.00 | 0.94 | 0.90 | 0.94 | 0.90 |
| 49 | VH945853 | 2 | 2,122 | 2,122 | 0.73 | 0.91 | 86.29 | 13.71 | 100.00 | 1.40 | 0.85 | 1.41 | 0.86 |
| 50 | VH945854 | 2 | 2,120 | 2,120 | 0.82 | 0.94 | 91.04 | 8.96 | 100.00 | 0.59 | 0.85 | 0.60 | 0.86 |
| N/A | **AVERAGE** | N/A | 1,530 | 1,530 | 0.71 | 0.83 | 89.93 | 10.07 | 100.00 | 0.42 | 0.66 | 0.41 | 0.64 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Six—Mathematics Short Answer

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH299282 | 1 | 2,837 | 2,837 | 0.96 | 0.96 | 98.66 | 1.34 | 100.00 | 0.24 | 0.43 | 0.24 | 0.43 |
| 2 | VH299283 | 2 | 2,763 | 2,763 | 0.71 | 0.87 | 83.17 | 16.50 | 99.67 | 1.33 | 0.84 | 1.33 | 0.84 |
| 3 | VH299285 | 2 | 2,756 | 2,756 | 0.80 | 0.89 | 88.21 | 11.57 | 99.78 | 0.63 | 0.76 | 0.64 | 0.76 |
| 4 | VH299287 | 2 | 2,728 | 2,728 | 0.50 | 0.69 | 79.11 | 19.54 | 98.64 | 0.36 | 0.65 | 0.34 | 0.63 |
| 5 | VH299454 | 2 | 2,712 | 2,712 | 0.63 | 0.81 | 81.64 | 17.26 | 98.89 | 0.51 | 0.76 | 0.48 | 0.75 |
| 6 | VH299455 | 1 | 2,755 | 2,755 | 0.82 | 0.82 | 95.72 | 4.28 | 100.00 | 0.14 | 0.35 | 0.13 | 0.34 |
| 7 | VH299456 | 2 | 2,683 | 2,683 | 0.50 | 0.69 | 79.58 | 17.55 | 97.13 | 0.39 | 0.70 | 0.35 | 0.66 |
| 8 | VH299482 | 1 | 2,819 | 2,819 | 0.96 | 0.96 | 98.51 | 1.49 | 100.00 | 0.23 | 0.42 | 0.22 | 0.42 |
| 9 | VH299484 | 2 | 2,734 | 2,734 | 0.70 | 0.86 | 82.44 | 16.97 | 99.41 | 1.34 | 0.84 | 1.32 | 0.84 |
| 10 | VH299485 | 2 | 2,739 | 2,739 | 0.82 | 0.90 | 88.35 | 11.54 | 99.89 | 0.76 | 0.78 | 0.76 | 0.78 |
| 11 | VH299486 | 2 | 2,708 | 2,708 | 0.47 | 0.66 | 79.91 | 17.84 | 97.75 | 0.33 | 0.64 | 0.30 | 0.62 |
| 12 | VH299520 | 2 | 2,703 | 2,703 | 0.62 | 0.80 | 82.17 | 16.91 | 99.08 | 0.45 | 0.73 | 0.44 | 0.72 |
| 13 | VH299521 | 1 | 2,774 | 2,774 | 0.86 | 0.86 | 96.03 | 3.97 | 100.00 | 0.18 | 0.38 | 0.18 | 0.39 |
| 14 | VH299522 | 2 | 2,741 | 2,741 | 0.67 | 0.83 | 92.12 | 6.90 | 99.01 | 0.21 | 0.57 | 0.21 | 0.56 |
| 15 | VH299582 | 1 | 2,751 | 2,751 | 0.95 | 0.95 | 97.60 | 2.40 | 100.00 | 0.41 | 0.49 | 0.41 | 0.49 |
| 16 | VH299585 | 1 | 2,769 | 2,769 | 0.84 | 0.84 | 93.93 | 6.07 | 100.00 | 0.26 | 0.44 | 0.26 | 0.44 |
| 17 | VH299586 | 2 | 2,684 | 2,684 | 0.48 | 0.66 | 72.21 | 26.01 | 98.21 | 0.51 | 0.71 | 0.49 | 0.68 |
| 18 | VH299652 | 2 | 2,708 | 2,708 | 0.64 | 0.82 | 82.53 | 16.43 | 98.97 | 0.49 | 0.77 | 0.46 | 0.74 |
| 19 | VH299655 | 2 | 2,753 | 2,753 | 0.70 | 0.84 | 90.74 | 7.48 | 98.22 | 0.31 | 0.68 | 0.28 | 0.66 |
| 20 | VH299788 | 1 | 2,789 | 2,789 | 0.96 | 0.96 | 98.17 | 1.83 | 100.00 | 0.37 | 0.48 | 0.37 | 0.48 |
| 21 | VH299790 | 2 | 2,705 | 2,705 | 0.60 | 0.74 | 74.42 | 25.18 | 99.59 | 0.90 | 0.72 | 0.89 | 0.72 |
| 22 | VH299792 | 2 | 2,716 | 2,716 | 0.62 | 0.73 | 83.17 | 16.09 | 99.26 | 0.36 | 0.59 | 0.36 | 0.59 |
| 23 | VH300109 | 2 | 40 | 40 | 0.85 | 0.91 | 95.00 | 5.00 | 100.00 | 0.25 | 0.54 | 0.25 | 0.54 |
| 24 | VH300114 | 2 | 2,870 | 2,870 | 0.63 | 0.82 | 82.75 | 16.13 | 98.89 | 0.47 | 0.76 | 0.45 | 0.74 |
| 25 | VH300125 | 1 | 2,948 | 2,948 | 0.87 | 0.87 | 96.40 | 3.60 | 100.00 | 0.17 | 0.38 | 0.17 | 0.37 |
| 26 | VH300126 | 2 | 2,898 | 2,898 | 0.66 | 0.82 | 92.34 | 6.73 | 99.07 | 0.20 | 0.55 | 0.18 | 0.52 |
| 27 | VH300153 | 2 | 35 | 35 | 0.69 | 0.90 | 94.29 | 5.71 | 100.00 | 0.17 | 0.51 | 0.17 | 0.57 |
| 28 | VH300155 | 2 | 2,899 | 2,899 | 0.62 | 0.80 | 81.58 | 17.21 | 98.79 | 0.48 | 0.75 | 0.47 | 0.74 |
| 29 | VH300163 | 2 | 2,908 | 2,908 | 0.68 | 0.85 | 90.10 | 8.80 | 98.90 | 0.31 | 0.67 | 0.28 | 0.65 |
| 30 | VH300196 | 2 | 2,712 | 2,712 | 0.64 | 0.81 | 82.52 | 16.08 | 98.60 | 0.48 | 0.75 | 0.46 | 0.75 |
| 31 | VH300197 | 1 | 2,795 | 2,795 | 0.82 | 0.82 | 95.49 | 4.51 | 100.00 | 0.15 | 0.35 | 0.15 | 0.35 |
| 32 | VH300198 | 2 | 2,684 | 2,684 | 0.51 | 0.71 | 81.26 | 16.77 | 98.03 | 0.35 | 0.67 | 0.33 | 0.65 |
| 33 | VH300202 | 1 | 2,793 | 2,793 | 0.87 | 0.87 | 95.74 | 4.26 | 100.00 | 0.21 | 0.41 | 0.21 | 0.41 |
| 34 | VH300205 | 2 | 2,710 | 2,710 | 0.59 | 0.74 | 74.24 | 25.35 | 99.59 | 0.89 | 0.71 | 0.88 | 0.72 |
| 35 | VH300206 | 2 | 2,724 | 2,724 | 0.65 | 0.73 | 84.62 | 14.68 | 99.30 | 0.35 | 0.57 | 0.35 | 0.57 |
| 36 | VH300384 | 1 | 2,891 | 2,891 | 0.96 | 0.96 | 98.34 | 1.66 | 100.00 | 0.36 | 0.48 | 0.35 | 0.48 |
| 37 | VH300390 | 1 | 2,891 | 2,891 | 0.87 | 0.87 | 95.05 | 4.95 | 100.00 | 0.27 | 0.44 | 0.27 | 0.44 |
| 38 | VH300397 | 2 | 2,833 | 2,833 | 0.49 | 0.67 | 73.21 | 25.13 | 98.34 | 0.50 | 0.71 | 0.48 | 0.69 |
| 39 | VH945791 | 2 | 2,806 | 2,806 | 0.67 | 0.76 | 88.31 | 11.65 | 99.96 | 0.25 | 0.50 | 0.25 | 0.50 |
| 40 | VH945795 | 2 | 2,817 | 2,817 | 0.61 | 0.76 | 78.42 | 21.48 | 99.89 | 0.51 | 0.67 | 0.52 | 0.68 |
| 41 | VH945796 | 2 | 2,800 | 2,800 | 0.56 | 0.77 | 82.46 | 17.36 | 99.82 | 0.34 | 0.63 | 0.33 | 0.63 |
| 42 | VH945801 | 2 | 2,826 | 2,826 | 0.59 | 0.79 | 77.85 | 21.97 | 99.82 | 0.52 | 0.74 | 0.54 | 0.75 |
| 43 | VH945802 | 2 | 2,827 | 2,827 | 0.57 | 0.77 | 83.55 | 16.20 | 99.75 | 0.31 | 0.62 | 0.31 | 0.61 |
| 44 | VH945803 | 2 | 2,817 | 2,817 | 0.69 | 0.80 | 88.36 | 11.50 | 99.86 | 0.28 | 0.55 | 0.29 | 0.56 |
| 45 | VH953696 | 2 | 2,757 | 2,757 | 0.69 | 0.87 | 87.78 | 12.04 | 99.82 | 0.37 | 0.71 | 0.38 | 0.72 |
| 46 | VH953698 | 2 | 2,720 | 2,720 | 0.70 | 0.87 | 90.66 | 8.75 | 99.41 | 0.29 | 0.65 | 0.29 | 0.64 |
| 47 | VH953704 | 2 | 2,798 | 2,798 | 0.95 | 0.99 | 98.68 | 1.29 | 99.96 | 0.31 | 0.71 | 0.31 | 0.71 |
| 48 | VH953705 | 2 | 2,805 | 2,805 | 0.78 | 0.91 | 86.20 | 13.65 | 99.86 | 1.02 | 0.90 | 1.01 | 0.91 |
| 49 | VH953706 | 2 | 2,742 | 2,742 | 0.76 | 0.90 | 90.88 | 8.64 | 99.53 | 0.39 | 0.75 | 0.38 | 0.74 |
| N/A | **AVERAGE** | N/A | 2,667 | 2,667 | 0.71 | 0.83 | 87.44 | 11.96 | 99.40 | 0.43 | 0.62 | 0.42 | 0.62 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Seven—Mathematics Short Answer

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH299055 | 2 | 2,606 | 2,606 | 0.79 | 0.90 | 89.26 | 10.02 | 99.27 | 0.55 | 0.82 | 0.54 | 0.81 |
| 2 | VH299074 | 1 | 2,835 | 2,835 | 0.94 | 0.94 | 98.34 | 1.66 | 100.00 | 0.17 | 0.38 | 0.17 | 0.38 |
| 3 | VH299212 | 1 | 44 | 44 | 0.00 | 0.00 | 97.73 | 2.27 | 100.00 | 0.00 | 0.00 | 0.02 | 0.15 |
| 4 | VH299227 | 2 | 2,699 | 2,699 | 0.50 | 0.63 | 81.99 | 17.41 | 99.41 | 0.27 | 0.52 | 0.25 | 0.51 |
| 5 | VH299240 | 2 | 2,349 | 2,349 | 0.57 | 0.77 | 89.23 | 9.92 | 99.15 | 0.20 | 0.55 | 0.21 | 0.53 |
| 6 | VH299242 | 2 | 2,526 | 2,526 | 0.77 | 0.82 | 87.53 | 12.27 | 99.80 | 0.53 | 0.60 | 0.52 | 0.59 |
| 7 | VH299248 | 2 | 2,375 | 2,375 | 0.49 | 0.67 | 89.31 | 9.52 | 98.82 | 0.17 | 0.48 | 0.15 | 0.45 |
| 8 | VH299249 | 1 | 2,529 | 2,529 | 0.88 | 0.88 | 97.39 | 2.61 | 100.00 | 0.12 | 0.33 | 0.13 | 0.33 |
| 9 | VH299574 | 2 | 2,357 | 2,357 | 0.53 | 0.72 | 90.54 | 8.53 | 99.07 | 0.16 | 0.48 | 0.15 | 0.46 |
| 10 | VH299575 | 2 | 2,386 | 2,386 | 0.63 | 0.81 | 77.33 | 22.17 | 99.50 | 0.69 | 0.79 | 0.68 | 0.79 |
| 11 | VH299577 | 2 | 2,520 | 2,520 | 0.77 | 0.82 | 87.18 | 12.62 | 99.80 | 0.55 | 0.61 | 0.56 | 0.61 |
| 12 | VH299869 | 2 | 2,441 | 2,441 | 0.61 | 0.80 | 81.89 | 17.33 | 99.22 | 0.45 | 0.73 | 0.43 | 0.71 |
| 13 | VH299871 | 1 | 2,532 | 2,532 | 0.87 | 0.87 | 97.20 | 2.80 | 100.00 | 0.12 | 0.33 | 0.12 | 0.33 |
| 14 | VH299872 | 2 | 2,448 | 2,448 | 0.54 | 0.74 | 85.78 | 12.79 | 98.57 | 0.26 | 0.61 | 0.25 | 0.58 |
| 15 | VH299927 | 2 | 2,495 | 2,495 | 0.42 | 0.56 | 80.28 | 18.92 | 99.20 | 0.25 | 0.51 | 0.24 | 0.49 |
| 16 | VH299950 | 2 | 2,464 | 2,464 | 0.60 | 0.78 | 80.64 | 18.26 | 98.90 | 0.47 | 0.72 | 0.45 | 0.72 |
| 17 | VH299952 | 1 | 2,542 | 2,542 | 0.84 | 0.84 | 96.62 | 3.38 | 100.00 | 0.12 | 0.32 | 0.12 | 0.33 |
| 18 | VH299953 | 2 | 2,499 | 2,499 | 0.56 | 0.77 | 87.03 | 11.52 | 98.56 | 0.26 | 0.62 | 0.25 | 0.60 |
| 19 | VH300022 | 1 | 2,609 | 2,609 | 0.93 | 0.93 | 98.01 | 1.99 | 100.00 | 0.18 | 0.39 | 0.18 | 0.39 |
| 20 | VH300070 | 2 | 2,466 | 2,466 | 0.74 | 0.89 | 87.92 | 11.60 | 99.51 | 0.50 | 0.80 | 0.50 | 0.79 |
| 21 | VH300071 | 2 | 2,591 | 2,591 | 0.79 | 0.91 | 90.00 | 9.30 | 99.31 | 0.53 | 0.81 | 0.52 | 0.81 |
| 22 | VH300090 | 2 | 2,410 | 2,410 | 0.50 | 0.72 | 89.83 | 9.29 | 99.13 | 0.16 | 0.48 | 0.15 | 0.47 |
| 23 | VH300091 | 2 | 2,426 | 2,426 | 0.67 | 0.82 | 79.88 | 19.79 | 99.67 | 0.66 | 0.78 | 0.65 | 0.77 |
| 24 | VH300092 | 1 | 2,540 | 2,540 | 0.81 | 0.81 | 95.59 | 4.41 | 100.00 | 0.14 | 0.34 | 0.14 | 0.35 |
| 25 | VH300259 | 2 | 2,548 | 2,548 | 0.78 | 0.91 | 89.48 | 9.93 | 99.41 | 0.53 | 0.81 | 0.53 | 0.81 |
| 26 | VH300318 | 2 | 2,446 | 2,446 | 0.47 | 0.70 | 89.90 | 9.24 | 99.14 | 0.15 | 0.47 | 0.15 | 0.45 |
| 27 | VH300320 | 2 | 2,463 | 2,463 | 0.64 | 0.81 | 77.26 | 22.49 | 99.76 | 0.71 | 0.78 | 0.71 | 0.78 |
| 28 | VH300449 | 2 | 2,582 | 2,582 | 0.81 | 0.90 | 90.67 | 8.29 | 98.95 | 0.53 | 0.80 | 0.51 | 0.80 |
| 29 | VH945848 | 2 | 2,529 | 2,529 | 0.86 | 0.95 | 93.32 | 6.52 | 99.84 | 0.53 | 0.82 | 0.52 | 0.81 |
| 30 | VH945860 | 2 | 2,577 | 2,577 | 0.78 | 0.91 | 86.85 | 12.96 | 99.81 | 0.77 | 0.88 | 0.76 | 0.88 |
| 31 | VH945902 | 2 | 2,476 | 2,476 | 0.78 | 0.90 | 89.98 | 9.98 | 99.96 | 0.42 | 0.71 | 0.43 | 0.71 |
| 32 | VH945903 | 2 | 2,444 | 2,444 | 0.83 | 0.94 | 92.64 | 7.24 | 99.88 | 0.52 | 0.84 | 0.52 | 0.84 |
| 33 | VH945904 | 3 | 2,435 | 2,435 | 0.52 | 0.84 | 80.33 | 19.38 | 99.71 | 0.40 | 0.81 | 0.39 | 0.79 |
| N/A | **AVERAGE** | N/A | 2,430 | 2,430 | 0.67 | 0.80 | 88.69 | 10.80 | 99.50 | 0.37 | 0.60 | 0.36 | 0.60 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Eight—Mathematics Short Answer

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH299087 | 2 | 2,792 | 2,792 | 0.69 | 0.84 | 87.18 | 12.57 | 99.75 | 0.36 | 0.65 | 0.35 | 0.65 |
| 2 | VH299088 | 1 | 2,747 | 2,747 | 0.56 | 0.56 | 84.16 | 15.84 | 100.00 | 0.23 | 0.42 | 0.24 | 0.43 |
| 3 | VH299314 | 2 | 36 | 36 | 0.58 | 0.74 | 94.44 | 5.56 | 100.00 | 0.06 | 0.23 | 0.11 | 0.40 |
| 4 | VH299320 | 1 | 2,850 | 2,850 | 0.92 | 0.92 | 96.95 | 3.05 | 100.00 | 0.25 | 0.43 | 0.25 | 0.43 |
| 5 | VH299325 | 2 | 2,697 | 2,697 | 0.53 | 0.71 | 86.99 | 12.09 | 99.07 | 0.21 | 0.52 | 0.20 | 0.51 |
| 6 | VH299489 | 1 | 2,788 | 2,788 | 0.95 | 0.95 | 98.13 | 1.87 | 100.00 | 0.27 | 0.45 | 0.27 | 0.45 |
| 7 | VH299494 | 2 | 2,650 | 2,650 | 0.59 | 0.73 | 88.11 | 10.94 | 99.06 | 0.22 | 0.53 | 0.21 | 0.52 |
| 8 | VH299669 | 2 | 2,750 | 2,750 | 0.68 | 0.85 | 88.33 | 11.60 | 99.93 | 0.31 | 0.63 | 0.32 | 0.63 |
| 9 | VH299670 | 1 | 2,811 | 2,811 | 0.62 | 0.62 | 83.42 | 16.58 | 100.00 | 0.33 | 0.47 | 0.32 | 0.47 |
| 10 | VH299712 | 1 | 2,832 | 2,832 | 0.95 | 0.95 | 98.02 | 1.98 | 100.00 | 0.29 | 0.45 | 0.29 | 0.45 |
| 11 | VH299713 | 2 | 2,702 | 2,702 | 0.59 | 0.79 | 84.20 | 14.66 | 98.85 | 0.35 | 0.67 | 0.34 | 0.67 |
| 12 | VH299739 | 2 | 2,718 | 2,718 | 0.79 | 0.91 | 90.99 | 8.83 | 99.82 | 0.42 | 0.73 | 0.42 | 0.73 |
| 13 | VH299741 | 2 | 2,848 | 2,848 | 0.95 | 0.98 | 97.58 | 2.18 | 99.75 | 0.53 | 0.80 | 0.54 | 0.80 |
| 14 | VH299742 | 1 | 2,738 | 2,738 | 0.62 | 0.62 | 83.53 | 16.47 | 100.00 | 0.32 | 0.47 | 0.33 | 0.47 |
| 15 | VH299806 | 2 | 47 | 47 | 0.73 | 0.85 | 95.74 | 4.26 | 100.00 | 0.11 | 0.37 | 0.11 | 0.37 |
| 16 | VH299807 | 1 | 2,918 | 2,918 | 0.92 | 0.92 | 97.16 | 2.84 | 100.00 | 0.24 | 0.43 | 0.24 | 0.43 |
| 17 | VH299811 | 2 | 2,737 | 2,737 | 0.61 | 0.78 | 88.64 | 10.67 | 99.31 | 0.23 | 0.55 | 0.23 | 0.55 |
| 18 | VH299900 | 2 | 2,725 | 2,725 | 0.67 | 0.82 | 85.87 | 13.72 | 99.60 | 0.37 | 0.66 | 0.37 | 0.66 |
| 19 | VH299901 | 2 | 2,818 | 2,818 | 0.91 | 0.94 | 96.66 | 3.09 | 99.75 | 0.28 | 0.57 | 0.28 | 0.57 |
| 20 | VH299902 | 1 | 2,714 | 2,714 | 0.66 | 0.66 | 85.26 | 14.74 | 100.00 | 0.31 | 0.46 | 0.31 | 0.46 |
| 21 | VH300054 | 2 | 2,725 | 2,725 | 0.75 | 0.88 | 89.28 | 10.61 | 99.89 | 0.38 | 0.69 | 0.38 | 0.69 |
| 22 | VH300055 | 2 | 2,840 | 2,840 | 0.96 | 0.98 | 98.17 | 1.76 | 99.93 | 0.56 | 0.82 | 0.56 | 0.82 |
| 23 | VH300056 | 1 | 2,739 | 2,739 | 0.61 | 0.61 | 82.58 | 17.42 | 100.00 | 0.34 | 0.47 | 0.33 | 0.47 |
| 24 | VH300080 | 1 | 2,807 | 2,807 | 0.94 | 0.94 | 97.72 | 2.28 | 100.00 | 0.27 | 0.44 | 0.27 | 0.44 |
| 25 | VH300081 | 2 | 2,674 | 2,674 | 0.62 | 0.78 | 88.67 | 10.70 | 99.36 | 0.24 | 0.56 | 0.23 | 0.54 |
| 26 | VH300246 | 1 | 2,804 | 2,804 | 0.94 | 0.94 | 97.25 | 2.75 | 100.00 | 0.31 | 0.46 | 0.32 | 0.47 |
| 27 | VH300247 | 2 | 2,684 | 2,684 | 0.61 | 0.80 | 85.10 | 13.64 | 98.73 | 0.35 | 0.68 | 0.35 | 0.68 |
| 28 | VH300337 | 2 | 2,779 | 2,779 | 0.68 | 0.84 | 88.84 | 10.94 | 99.78 | 0.28 | 0.61 | 0.29 | 0.61 |
| 29 | VH300340 | 1 | 2,839 | 2,839 | 0.59 | 0.59 | 83.16 | 16.84 | 100.00 | 0.28 | 0.45 | 0.29 | 0.45 |
| 30 | VH300345 | 2 | 2,932 | 2,932 | 0.84 | 0.90 | 93.11 | 6.68 | 99.80 | 0.34 | 0.61 | 0.33 | 0.60 |
| 31 | VH945762 | 1 | 2,832 | 2,832 | 0.48 | 0.48 | 87.92 | 12.08 | 100.00 | 0.14 | 0.35 | 0.13 | 0.33 |
| 32 | VH945765 | 2 | 2,744 | 2,744 | 0.55 | 0.80 | 87.21 | 12.72 | 99.93 | 0.24 | 0.58 | 0.23 | 0.57 |
| 33 | VH945783 | 2 | 2,790 | 2,790 | 0.61 | 0.80 | 77.38 | 22.44 | 99.82 | 0.61 | 0.75 | 0.61 | 0.75 |
| 34 | VH945881 | 1 | 2,942 | 2,942 | 0.79 | 0.79 | 93.78 | 6.22 | 100.00 | 0.18 | 0.38 | 0.19 | 0.39 |
| 35 | VH945882 | 1 | 2,858 | 2,858 | 0.63 | 0.63 | 86.46 | 13.54 | 100.00 | 0.24 | 0.43 | 0.24 | 0.43 |
| 36 | VH945885 | 2 | 2,863 | 2,863 | 0.66 | 0.86 | 89.35 | 10.55 | 99.90 | 0.28 | 0.64 | 0.28 | 0.63 |
| 37 | VH945891 | 2 | 2,811 | 2,811 | 0.60 | 0.78 | 76.88 | 23.02 | 99.89 | 0.58 | 0.74 | 0.57 | 0.73 |
| N/A | **AVERAGE** | N/A | 2,637 | 2,637 | 0.71 | 0.80 | 89.57 | 10.21 | 99.78 | 0.31 | 0.55 | 0.31 | 0.55 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Eleven—Mathematics Short Answer

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH299384 | 1 | 2,896 | 2,896 | 0.65 | 0.65 | 90.12 | 9.88 | 100.00 | 0.17 | 0.37 | 0.17 | 0.38 |
| 2 | VH299385 | 1 | 3,038 | 3,038 | 0.98 | 0.98 | 99.18 | 0.82 | 100.00 | 0.27 | 0.44 | 0.26 | 0.44 |
| 3 | VH299386 | 2 | 3,059 | 3,059 | 0.93 | 0.94 | 98.43 | 0.82 | 99.25 | 0.21 | 0.58 | 0.21 | 0.57 |
| 4 | VH299552 | 1 | 139 | 139 | 0.68 | 0.68 | 84.17 | 15.83 | 100.00 | 0.46 | 0.50 | 0.45 | 0.50 |
| 5 | VH299555 | 2 | 130 | 130 | 0.56 | 0.79 | 84.62 | 13.85 | 98.46 | 0.29 | 0.66 | 0.37 | 0.71 |
| 6 | VH299660 | 2 | 3,010 | 3,010 | 0.84 | 0.91 | 97.81 | 1.83 | 99.63 | 0.12 | 0.43 | 0.11 | 0.42 |
| 7 | VH299661 | 2 | 3,037 | 3,037 | 0.85 | 0.90 | 97.14 | 2.01 | 99.14 | 0.18 | 0.53 | 0.17 | 0.52 |
| 8 | VH299835 | 1 | 3,059 | 3,059 | 0.94 | 0.94 | 98.27 | 1.73 | 100.00 | 0.17 | 0.38 | 0.17 | 0.38 |
| 9 | VH299836 | 1 | 3,055 | 3,055 | 0.98 | 0.98 | 99.15 | 0.85 | 100.00 | 0.38 | 0.49 | 0.39 | 0.49 |
| 10 | VH299910 | 2 | 3,376 | 3,376 | 0.92 | 0.94 | 97.36 | 1.78 | 99.14 | 0.32 | 0.67 | 0.32 | 0.67 |
| 11 | VH299956 | 1 | 155 | 155 | 0.75 | 0.75 | 94.19 | 5.81 | 100.00 | 0.12 | 0.33 | 0.14 | 0.35 |
| 12 | VH299958 | 2 | 3,070 | 3,070 | 0.86 | 0.92 | 98.01 | 1.60 | 99.61 | 0.12 | 0.45 | 0.12 | 0.44 |
| 13 | VH299961 | 2 | 3,069 | 3,069 | 0.94 | 0.95 | 97.98 | 1.34 | 99.32 | 0.31 | 0.66 | 0.31 | 0.66 |
| 14 | VH299965 | 3 | 172 | 172 | 0.66 | 0.92 | 90.70 | 8.14 | 98.84 | 0.37 | 0.93 | 0.36 | 0.88 |
| 15 | VH300132 | 2 | 3,025 | 3,025 | 0.83 | 0.87 | 96.40 | 2.74 | 99.14 | 0.17 | 0.50 | 0.16 | 0.49 |
| 16 | VH300176 | 1 | 3,052 | 3,052 | 0.98 | 0.98 | 99.12 | 0.88 | 100.00 | 0.25 | 0.44 | 0.25 | 0.43 |
| 17 | VH300177 | 2 | 3,054 | 3,054 | 0.97 | 0.98 | 98.95 | 0.65 | 99.61 | 0.40 | 0.76 | 0.40 | 0.76 |
| 18 | VH300222 | 2 | 207 | 207 | 0.77 | 0.92 | 86.96 | 13.04 | 100.00 | 0.69 | 0.90 | 0.69 | 0.87 |
| 19 | VH300224 | 2 | 217 | 217 | 0.67 | 0.78 | 80.18 | 19.82 | 100.00 | 0.70 | 0.65 | 0.73 | 0.68 |
| 20 | VH945812 | 1 | 2,951 | 2,951 | 0.79 | 0.79 | 91.32 | 8.68 | 100.00 | 0.29 | 0.45 | 0.29 | 0.45 |
| 21 | VH945814 | 2 | 3,075 | 3,075 | 0.84 | 0.92 | 96.49 | 3.35 | 99.84 | 0.17 | 0.49 | 0.17 | 0.50 |
| 22 | VH945815 | 3 | 2,849 | 2,849 | 0.52 | 0.83 | 73.39 | 25.48 | 98.88 | 0.63 | 0.94 | 0.64 | 0.93 |
| 23 | VH945894 | 1 | 2,974 | 2,974 | 0.75 | 0.75 | 89.74 | 10.26 | 100.00 | 0.29 | 0.45 | 0.29 | 0.45 |
| 24 | VH945897 | 2 | 2,948 | 2,948 | 0.74 | 0.90 | 87.45 | 11.87 | 99.32 | 0.55 | 0.84 | 0.54 | 0.83 |
| 25 | VH945898 | 2 | 2,879 | 2,879 | 0.84 | 0.94 | 91.49 | 8.20 | 99.69 | 0.68 | 0.89 | 0.68 | 0.89 |
| 26 | VH953747 | 1 | 2,943 | 2,943 | 0.75 | 0.75 | 89.13 | 10.87 | 100.00 | 0.32 | 0.46 | 0.32 | 0.47 |
| 27 | VH953750 | 2 | 2,783 | 2,783 | 0.76 | 0.90 | 89.72 | 9.99 | 99.71 | 0.42 | 0.75 | 0.44 | 0.75 |
| N/A | **AVERAGE** | N/A | 2,379 | 2,379 | 0.81 | 0.87 | 92.50 | 7.11 | 99.61 | 0.34 | 0.59 | 0.34 | 0.59 |

**Notes and Legend:**

The following is true for table 8.G.15 through table 8.G.20:

Numbers indicate students who received valid ratings.

Rater 2 is the backup rater.

Dimension types are as follows:

* Organization/Purpose (POR)
* Development/Elaboration (DEV)
* Evidence/Elaboration (EEL)
* Convention (COV)

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Three—ELA Writing Extended Response (WER)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Dimension Type | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH295418 | 2 | COV | 1,735 | 1,735 | 0.35 | 0.54 | 59.37 | 38.90 | 98.27 | 1.10 | 0.71 | 1.10 | 0.71 |
| 2 | VH295561 | 2 | COV | 1,310 | 1,310 | 0.35 | 0.56 | 59.39 | 39.39 | 98.78 | 1.07 | 0.71 | 1.06 | 0.72 |
| 3 | VH295670 | 2 | COV | 1,452 | 1,452 | 0.32 | 0.50 | 58.40 | 39.60 | 98.00 | 1.16 | 0.69 | 1.14 | 0.70 |
| 4 | VH295713 | 2 | COV | 1,420 | 1,420 | 0.38 | 0.55 | 61.48 | 36.83 | 98.31 | 1.15 | 0.70 | 1.15 | 0.70 |
| 5 | VH295950 | 2 | COV | 689 | 689 | 0.29 | 0.50 | 56.89 | 42.09 | 98.98 | 1.15 | 0.68 | 1.14 | 0.69 |
| 6 | VH295962 | 2 | COV | 1,365 | 1,365 | 0.30 | 0.49 | 57.14 | 40.88 | 98.02 | 1.13 | 0.69 | 1.12 | 0.69 |
| 7 | VH295997 | 2 | COV | 1,591 | 1,591 | 0.34 | 0.56 | 58.83 | 40.35 | 99.18 | 1.13 | 0.70 | 1.14 | 0.71 |
| 8 | VH296068 | 2 | COV | 831 | 831 | 0.34 | 0.53 | 60.17 | 38.63 | 98.80 | 1.14 | 0.67 | 1.15 | 0.70 |
| 9 | VH945444 | 2 | COV | 1,306 | 1,306 | 0.30 | 0.49 | 57.81 | 40.81 | 98.62 | 1.08 | 0.67 | 1.08 | 0.68 |
| 10 | VH945454 | 2 | COV | 1,636 | 1,636 | 0.33 | 0.51 | 59.35 | 39.06 | 98.41 | 1.13 | 0.68 | 1.12 | 0.68 |
| 11 | VH945558 | 2 | COV | 1,683 | 1,683 | 0.32 | 0.53 | 57.52 | 41.18 | 98.69 | 1.12 | 0.69 | 1.12 | 0.72 |
| 12 | VH945568 | 2 | COV | 813 | 813 | 0.32 | 0.55 | 57.44 | 41.57 | 99.02 | 1.14 | 0.70 | 1.13 | 0.72 |
| 13 | VH945579 | 2 | COV | 1,666 | 1,666 | 0.35 | 0.53 | 60.38 | 37.88 | 98.26 | 1.14 | 0.69 | 1.14 | 0.69 |
| 14 | VH295561 | 4 | DVE | 1,310 | 1,310 | 0.38 | 0.62 | 60.38 | 37.33 | 97.71 | 1.82 | 0.78 | 1.82 | 0.79 |
| 15 | VH295950 | 4 | DVE | 689 | 689 | 0.39 | 0.64 | 59.80 | 37.74 | 97.53 | 1.88 | 0.82 | 1.89 | 0.83 |
| 16 | VH296068 | 4 | DVE | 831 | 831 | 0.35 | 0.63 | 58.48 | 39.35 | 97.83 | 1.80 | 0.80 | 1.84 | 0.81 |
| 17 | VH945444 | 4 | DVE | 1,306 | 1,306 | 0.39 | 0.63 | 60.80 | 36.45 | 97.24 | 1.87 | 0.80 | 1.89 | 0.82 |
| 18 | VH945568 | 4 | DVE | 813 | 813 | 0.37 | 0.58 | 59.53 | 36.90 | 96.43 | 1.87 | 0.81 | 1.83 | 0.77 |
| 19 | VH295418 | 4 | EEL | 1,735 | 1,735 | 0.40 | 0.58 | 63.63 | 34.01 | 97.64 | 1.69 | 0.73 | 1.70 | 0.72 |
| 20 | VH295670 | 4 | EEL | 1,452 | 1,452 | 0.35 | 0.55 | 60.26 | 36.50 | 96.76 | 1.72 | 0.74 | 1.72 | 0.74 |
| 21 | VH295713 | 4 | EEL | 1,420 | 1,420 | 0.34 | 0.54 | 60.21 | 37.18 | 97.39 | 1.68 | 0.74 | 1.70 | 0.71 |
| 22 | VH295962 | 4 | EEL | 1,365 | 1,365 | 0.35 | 0.56 | 60.07 | 37.80 | 97.88 | 1.72 | 0.73 | 1.70 | 0.72 |
| 23 | VH295997 | 4 | EEL | 1,591 | 1,591 | 0.31 | 0.54 | 58.58 | 38.78 | 97.36 | 1.67 | 0.72 | 1.69 | 0.75 |
| 24 | VH945454 | 4 | EEL | 1,636 | 1,636 | 0.37 | 0.57 | 61.19 | 36.49 | 97.68 | 1.78 | 0.72 | 1.80 | 0.74 |
| 25 | VH945558 | 4 | EEL | 1,683 | 1,683 | 0.37 | 0.58 | 61.38 | 36.72 | 98.10 | 1.72 | 0.74 | 1.70 | 0.72 |
| 26 | VH945579 | 4 | EEL | 1,666 | 1,666 | 0.38 | 0.58 | 61.70 | 35.71 | 97.42 | 1.75 | 0.73 | 1.73 | 0.75 |
| 27 | VH295418 | 4 | POR | 1,735 | 1,735 | 0.38 | 0.58 | 62.19 | 35.50 | 97.69 | 1.70 | 0.73 | 1.70 | 0.73 |
| 28 | VH295561 | 4 | POR | 1,310 | 1,310 | 0.36 | 0.62 | 58.85 | 38.93 | 97.79 | 1.89 | 0.79 | 1.88 | 0.79 |
| 29 | VH295670 | 4 | POR | 1,452 | 1,452 | 0.36 | 0.58 | 60.95 | 37.19 | 98.14 | 1.69 | 0.73 | 1.70 | 0.73 |
| 30 | VH295713 | 4 | POR | 1,420 | 1,420 | 0.35 | 0.56 | 59.93 | 37.75 | 97.68 | 1.73 | 0.74 | 1.74 | 0.72 |
| 31 | VH295950 | 4 | POR | 689 | 689 | 0.40 | 0.64 | 60.38 | 37.01 | 97.39 | 1.92 | 0.83 | 1.92 | 0.81 |
| 32 | VH295962 | 4 | POR | 1,365 | 1,365 | 0.31 | 0.53 | 57.00 | 40.51 | 97.51 | 1.79 | 0.74 | 1.77 | 0.73 |
| 33 | VH295997 | 4 | POR | 1,591 | 1,591 | 0.33 | 0.55 | 59.71 | 37.65 | 97.36 | 1.65 | 0.73 | 1.67 | 0.73 |
| 34 | VH296068 | 4 | POR | 831 | 831 | 0.37 | 0.63 | 58.84 | 38.75 | 97.59 | 1.86 | 0.81 | 1.89 | 0.81 |
| 35 | VH945444 | 4 | POR | 1,306 | 1,306 | 0.41 | 0.65 | 62.10 | 35.83 | 97.93 | 1.94 | 0.78 | 1.97 | 0.82 |
| 36 | VH945454 | 4 | POR | 1,636 | 1,636 | 0.40 | 0.59 | 62.90 | 34.66 | 97.56 | 1.81 | 0.74 | 1.82 | 0.73 |
| 37 | VH945558 | 4 | POR | 1,683 | 1,683 | 0.38 | 0.58 | 62.57 | 35.23 | 97.80 | 1.71 | 0.73 | 1.69 | 0.72 |
| 38 | VH945568 | 4 | POR | 813 | 813 | 0.35 | 0.56 | 57.81 | 38.50 | 96.31 | 1.90 | 0.81 | 1.89 | 0.76 |
| 39 | VH945579 | 4 | POR | 1,666 | 1,666 | 0.41 | 0.61 | 63.81 | 34.15 | 97.96 | 1.72 | 0.73 | 1.70 | 0.74 |
| N/A | **AVERAGE** | N/A | N/A | 1,346 | 1,346 | 0.36 | 0.57 | 59.93 | 37.94 | 97.87 | 1.56 | 0.74 | 1.56 | 0.74 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Four—ELA WER

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Dimension Type | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH295258 | 2 | COV | 1,399 | 1,399 | 0.34 | 0.54 | 59.47 | 38.88 | 98.36 | 1.22 | 0.70 | 1.25 | 0.70 |
| 2 | VH295351 | 2 | COV | 1,299 | 1,299 | 0.33 | 0.54 | 58.89 | 40.18 | 99.08 | 1.24 | 0.69 | 1.23 | 0.69 |
| 3 | VH295426 | 2 | COV | 1,441 | 1,441 | 0.31 | 0.50 | 58.57 | 39.90 | 98.47 | 1.25 | 0.68 | 1.27 | 0.68 |
| 4 | VH295459 | 2 | COV | 1,468 | 1,468 | 0.35 | 0.53 | 61.44 | 37.67 | 99.11 | 1.35 | 0.66 | 1.34 | 0.66 |
| 5 | VH295493 | 2 | COV | 1,493 | 1,493 | 0.35 | 0.54 | 60.15 | 38.31 | 98.46 | 1.25 | 0.70 | 1.21 | 0.69 |
| 6 | VH295522 | 2 | COV | 1,539 | 1,539 | 0.34 | 0.52 | 60.23 | 38.27 | 98.51 | 1.30 | 0.69 | 1.29 | 0.67 |
| 7 | VH295587 | 2 | COV | 1,047 | 1,047 | 0.34 | 0.52 | 59.50 | 38.59 | 98.09 | 1.27 | 0.69 | 1.26 | 0.71 |
| 8 | VH295631 | 2 | COV | 1,233 | 1,233 | 0.36 | 0.55 | 61.72 | 37.23 | 98.95 | 1.30 | 0.68 | 1.32 | 0.67 |
| 9 | VH295644 | 2 | COV | 1,183 | 1,183 | 0.32 | 0.52 | 58.83 | 39.81 | 98.65 | 1.28 | 0.69 | 1.29 | 0.69 |
| 10 | VH295707 | 2 | COV | 1,339 | 1,339 | 0.33 | 0.48 | 60.04 | 38.09 | 98.13 | 1.28 | 0.65 | 1.29 | 0.67 |
| 11 | VH295731 | 2 | COV | 1,484 | 1,484 | 0.35 | 0.56 | 59.37 | 38.88 | 98.25 | 1.22 | 0.72 | 1.24 | 0.72 |
| 12 | VH295775 | 2 | COV | 1,377 | 1,377 | 0.37 | 0.56 | 62.02 | 36.82 | 98.84 | 1.25 | 0.69 | 1.25 | 0.68 |
| 13 | VH295781 | 2 | COV | 1,251 | 1,251 | 0.35 | 0.54 | 61.07 | 37.89 | 98.96 | 1.21 | 0.67 | 1.24 | 0.67 |
| 14 | VH295787 | 2 | COV | 1,418 | 1,418 | 0.32 | 0.51 | 59.24 | 39.49 | 98.73 | 1.32 | 0.67 | 1.33 | 0.68 |
| 15 | VH295858 | 2 | COV | 1,041 | 1,041 | 0.33 | 0.53 | 60.81 | 38.62 | 99.42 | 1.34 | 0.66 | 1.34 | 0.66 |
| 16 | VH295865 | 2 | COV | 1,270 | 1,270 | 0.35 | 0.52 | 60.79 | 37.72 | 98.50 | 1.26 | 0.69 | 1.26 | 0.66 |
| 17 | VH295892 | 2 | COV | 1,458 | 1,458 | 0.38 | 0.56 | 63.44 | 35.46 | 98.90 | 1.33 | 0.67 | 1.34 | 0.67 |
| 18 | VH295956 | 2 | COV | 1,549 | 1,549 | 0.36 | 0.54 | 61.20 | 36.93 | 98.13 | 1.29 | 0.68 | 1.30 | 0.70 |
| 19 | VH945429 | 2 | COV | 836 | 836 | 0.34 | 0.51 | 61.60 | 36.96 | 98.56 | 1.38 | 0.65 | 1.38 | 0.67 |
| 20 | VH945439 | 2 | COV | 1,601 | 1,601 | 0.37 | 0.53 | 61.09 | 36.29 | 97.38 | 1.28 | 0.71 | 1.25 | 0.70 |
| 21 | VH945563 | 2 | COV | 1,502 | 1,502 | 0.32 | 0.53 | 58.99 | 39.68 | 98.67 | 1.28 | 0.68 | 1.30 | 0.70 |
| 22 | VH945588 | 2 | COV | 1,016 | 1,016 | 0.37 | 0.56 | 61.91 | 37.11 | 99.02 | 1.30 | 0.68 | 1.31 | 0.69 |
| 23 | VH295258 | 4 | DVE | 1,399 | 1,399 | 0.39 | 0.66 | 58.33 | 38.74 | 97.07 | 2.24 | 0.87 | 2.27 | 0.87 |
| 24 | VH295351 | 4 | DVE | 1,299 | 1,299 | 0.39 | 0.69 | 56.81 | 40.42 | 97.23 | 2.21 | 0.91 | 2.18 | 0.92 |
| 25 | VH295587 | 4 | DVE | 1,047 | 1,047 | 0.35 | 0.67 | 54.35 | 42.60 | 96.94 | 2.30 | 0.91 | 2.31 | 0.92 |
| 26 | VH295644 | 4 | DVE | 1,183 | 1,183 | 0.36 | 0.63 | 56.21 | 39.81 | 96.03 | 2.18 | 0.89 | 2.22 | 0.86 |
| 27 | VH295775 | 4 | DVE | 1,377 | 1,377 | 0.34 | 0.64 | 54.61 | 41.98 | 96.59 | 2.16 | 0.87 | 2.18 | 0.89 |
| 28 | VH295781 | 4 | DVE | 1,251 | 1,251 | 0.33 | 0.62 | 55.72 | 42.29 | 98.00 | 2.06 | 0.82 | 2.08 | 0.82 |
| 29 | VH295858 | 4 | DVE | 1,041 | 1,041 | 0.38 | 0.66 | 57.16 | 39.67 | 96.83 | 2.28 | 0.89 | 2.30 | 0.88 |
| 30 | VH295865 | 4 | DVE | 1,270 | 1,270 | 0.38 | 0.65 | 57.87 | 38.98 | 96.85 | 2.14 | 0.85 | 2.14 | 0.87 |
| 31 | VH945429 | 4 | DVE | 836 | 836 | 0.35 | 0.64 | 54.90 | 41.99 | 96.89 | 2.40 | 0.89 | 2.39 | 0.88 |
| 32 | VH945588 | 4 | DVE | 1,016 | 1,016 | 0.37 | 0.67 | 55.71 | 41.14 | 96.85 | 2.29 | 0.87 | 2.34 | 0.92 |
| 33 | VH295426 | 4 | EEL | 1,441 | 1,441 | 0.30 | 0.56 | 53.71 | 42.54 | 96.25 | 1.93 | 0.82 | 1.92 | 0.84 |
| 34 | VH295459 | 4 | EEL | 1,468 | 1,468 | 0.30 | 0.58 | 54.16 | 43.26 | 97.41 | 2.10 | 0.80 | 2.11 | 0.81 |
| 35 | VH295493 | 4 | EEL | 1,493 | 1,493 | 0.34 | 0.57 | 56.46 | 39.45 | 95.91 | 1.94 | 0.82 | 1.91 | 0.81 |
| 36 | VH295522 | 4 | EEL | 1,539 | 1,539 | 0.34 | 0.60 | 56.14 | 40.29 | 96.43 | 2.08 | 0.83 | 2.08 | 0.84 |
| 37 | VH295631 | 4 | EEL | 1,233 | 1,233 | 0.33 | 0.59 | 54.91 | 40.96 | 95.86 | 2.06 | 0.85 | 2.08 | 0.83 |
| 38 | VH295707 | 4 | EEL | 1,339 | 1,339 | 0.36 | 0.58 | 58.78 | 37.42 | 96.19 | 1.94 | 0.79 | 1.92 | 0.80 |
| 39 | VH295731 | 4 | EEL | 1,484 | 1,484 | 0.38 | 0.59 | 59.23 | 36.25 | 95.49 | 1.93 | 0.82 | 1.93 | 0.83 |
| 40 | VH295787 | 4 | EEL | 1,418 | 1,418 | 0.33 | 0.62 | 53.67 | 42.17 | 95.84 | 2.18 | 0.89 | 2.13 | 0.88 |
| 41 | VH295892 | 4 | EEL | 1,458 | 1,458 | 0.30 | 0.55 | 53.98 | 41.98 | 95.95 | 2.03 | 0.80 | 2.06 | 0.81 |
| 42 | VH295956 | 4 | EEL | 1,549 | 1,549 | 0.35 | 0.61 | 57.07 | 39.51 | 96.58 | 2.01 | 0.84 | 1.98 | 0.81 |
| 43 | VH945439 | 4 | EEL | 1,601 | 1,601 | 0.34 | 0.61 | 55.03 | 41.54 | 96.56 | 2.02 | 0.86 | 2.01 | 0.84 |
| 44 | VH945563 | 4 | EEL | 1,502 | 1,502 | 0.34 | 0.56 | 56.39 | 38.88 | 95.27 | 1.98 | 0.80 | 1.98 | 0.82 |
| 45 | VH295258 | 4 | POR | 1,399 | 1,399 | 0.40 | 0.67 | 59.26 | 38.38 | 97.64 | 2.27 | 0.85 | 2.30 | 0.86 |
| 46 | VH295351 | 4 | POR | 1,299 | 1,299 | 0.41 | 0.69 | 58.89 | 38.26 | 97.15 | 2.26 | 0.91 | 2.23 | 0.90 |
| 47 | VH295426 | 4 | POR | 1,441 | 1,441 | 0.37 | 0.61 | 58.22 | 37.96 | 96.18 | 1.92 | 0.81 | 1.90 | 0.85 |
| 48 | VH295459 | 4 | POR | 1,468 | 1,468 | 0.32 | 0.60 | 55.86 | 42.03 | 97.89 | 2.13 | 0.79 | 2.15 | 0.81 |
| 49 | VH295493 | 4 | POR | 1,493 | 1,493 | 0.37 | 0.62 | 58.67 | 38.45 | 97.12 | 1.95 | 0.82 | 1.91 | 0.82 |
| 50 | VH295522 | 4 | POR | 1,539 | 1,539 | 0.36 | 0.63 | 56.86 | 40.29 | 97.14 | 2.06 | 0.84 | 2.05 | 0.85 |
| 51 | VH295587 | 4 | POR | 1,047 | 1,047 | 0.39 | 0.70 | 57.78 | 40.69 | 98.47 | 2.33 | 0.89 | 2.33 | 0.89 |
| 52 | VH295631 | 4 | POR | 1,233 | 1,233 | 0.32 | 0.59 | 54.74 | 41.52 | 96.27 | 2.11 | 0.82 | 2.16 | 0.84 |
| 53 | VH295644 | 4 | POR | 1,183 | 1,183 | 0.35 | 0.65 | 55.62 | 41.42 | 97.04 | 2.22 | 0.89 | 2.25 | 0.87 |
| 54 | VH295707 | 4 | POR | 1,339 | 1,339 | 0.35 | 0.58 | 57.43 | 39.13 | 96.56 | 1.97 | 0.78 | 1.97 | 0.81 |
| 55 | VH295731 | 4 | POR | 1,484 | 1,484 | 0.39 | 0.61 | 59.70 | 36.52 | 96.23 | 1.93 | 0.82 | 1.93 | 0.83 |
| 56 | VH295775 | 4 | POR | 1,377 | 1,377 | 0.34 | 0.66 | 54.97 | 42.41 | 97.39 | 2.21 | 0.87 | 2.22 | 0.88 |
| 57 | VH295781 | 4 | POR | 1,251 | 1,251 | 0.33 | 0.61 | 55.48 | 41.89 | 97.36 | 2.13 | 0.82 | 2.11 | 0.83 |
| 58 | VH295787 | 4 | POR | 1,418 | 1,418 | 0.35 | 0.64 | 55.15 | 41.40 | 96.54 | 2.18 | 0.89 | 2.15 | 0.88 |
| 59 | VH295858 | 4 | POR | 1,041 | 1,041 | 0.36 | 0.67 | 56.58 | 41.50 | 98.08 | 2.33 | 0.88 | 2.36 | 0.86 |
| 60 | VH295865 | 4 | POR | 1,270 | 1,270 | 0.38 | 0.64 | 58.19 | 38.82 | 97.01 | 2.17 | 0.84 | 2.17 | 0.84 |
| 61 | VH295892 | 4 | POR | 1,458 | 1,458 | 0.36 | 0.60 | 57.82 | 39.23 | 97.05 | 2.01 | 0.81 | 2.04 | 0.80 |
| 62 | VH295956 | 4 | POR | 1,549 | 1,549 | 0.35 | 0.61 | 56.23 | 40.15 | 96.38 | 2.01 | 0.85 | 1.98 | 0.83 |
| 63 | VH945429 | 4 | POR | 836 | 836 | 0.36 | 0.63 | 55.74 | 40.55 | 96.29 | 2.44 | 0.88 | 2.42 | 0.86 |
| 64 | VH945439 | 4 | POR | 1,601 | 1,601 | 0.37 | 0.64 | 57.46 | 39.66 | 97.13 | 2.01 | 0.85 | 1.99 | 0.85 |
| 65 | VH945563 | 4 | POR | 1,502 | 1,502 | 0.37 | 0.60 | 58.46 | 37.88 | 96.34 | 1.98 | 0.81 | 1.98 | 0.83 |
| 66 | VH945588 | 4 | POR | 1,016 | 1,016 | 0.33 | 0.64 | 53.74 | 42.81 | 96.56 | 2.34 | 0.87 | 2.38 | 0.91 |
| N/A | **AVERAGE** | N/A | N/A | 1,329 | 1,329 | 0.35 | 0.59 | 57.79 | 39.57 | 97.36 | 1.84 | 0.79 | 1.85 | 0.80 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Five—ELA WER

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Dimension Type | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH295215 | 2 | COV | 1,295 | 1,295 | 0.36 | 0.50 | 63.86 | 34.29 | 98.15 | 1.46 | 0.64 | 1.44 | 0.65 |
| 2 | VH295230 | 2 | COV | 1,507 | 1,507 | 0.41 | 0.58 | 66.03 | 32.58 | 98.61 | 1.42 | 0.67 | 1.43 | 0.67 |
| 3 | VH295238 | 2 | COV | 1,462 | 1,462 | 0.39 | 0.55 | 65.25 | 33.31 | 98.56 | 1.43 | 0.67 | 1.42 | 0.66 |
| 4 | VH295406 | 2 | COV | 1,520 | 1,520 | 0.37 | 0.56 | 62.63 | 36.18 | 98.82 | 1.34 | 0.69 | 1.34 | 0.68 |
| 5 | VH295431 | 2 | COV | 1,563 | 1,563 | 0.32 | 0.51 | 61.10 | 37.62 | 98.72 | 1.41 | 0.66 | 1.41 | 0.66 |
| 6 | VH295452 | 2 | COV | 1,511 | 1,511 | 0.34 | 0.52 | 61.09 | 37.72 | 98.81 | 1.37 | 0.66 | 1.37 | 0.67 |
| 7 | VH295480 | 2 | COV | 1,400 | 1,400 | 0.32 | 0.47 | 60.86 | 37.43 | 98.29 | 1.39 | 0.65 | 1.42 | 0.64 |
| 8 | VH295543 | 2 | COV | 1,443 | 1,443 | 0.35 | 0.53 | 62.37 | 36.31 | 98.68 | 1.38 | 0.66 | 1.42 | 0.66 |
| 9 | VH295740 | 2 | COV | 1,343 | 1,343 | 0.31 | 0.47 | 59.79 | 38.72 | 98.51 | 1.38 | 0.64 | 1.37 | 0.66 |
| 10 | VH295793 | 2 | COV | 1,422 | 1,422 | 0.36 | 0.51 | 64.84 | 33.90 | 98.73 | 1.48 | 0.63 | 1.47 | 0.63 |
| 11 | VH295810 | 2 | COV | 1,351 | 1,351 | 0.33 | 0.46 | 61.88 | 36.27 | 98.15 | 1.40 | 0.64 | 1.41 | 0.64 |
| 12 | VH295835 | 2 | COV | 1,454 | 1,454 | 0.39 | 0.55 | 65.41 | 33.43 | 98.83 | 1.42 | 0.65 | 1.43 | 0.64 |
| 13 | VH295900 | 2 | COV | 1,035 | 1,035 | 0.38 | 0.56 | 66.28 | 33.33 | 99.61 | 1.48 | 0.64 | 1.49 | 0.62 |
| 14 | VH295920 | 2 | COV | 1,380 | 1,380 | 0.35 | 0.50 | 62.25 | 35.58 | 97.83 | 1.40 | 0.67 | 1.37 | 0.67 |
| 15 | VH295971 | 2 | COV | 1,536 | 1,536 | 0.40 | 0.56 | 64.71 | 34.05 | 98.76 | 1.39 | 0.66 | 1.37 | 0.67 |
| 16 | VH296033 | 2 | COV | 1,375 | 1,375 | 0.37 | 0.51 | 64.22 | 34.55 | 98.76 | 1.43 | 0.63 | 1.42 | 0.64 |
| 17 | VH296047 | 2 | COV | 1,315 | 1,315 | 0.34 | 0.52 | 61.83 | 37.03 | 98.86 | 1.37 | 0.67 | 1.40 | 0.65 |
| 18 | VH296072 | 2 | COV | 1,500 | 1,500 | 0.34 | 0.52 | 62.67 | 36.27 | 98.93 | 1.44 | 0.64 | 1.41 | 0.66 |
| 19 | VH296081 | 2 | COV | 1,523 | 1,523 | 0.33 | 0.51 | 62.11 | 36.31 | 98.42 | 1.44 | 0.65 | 1.45 | 0.66 |
| 20 | VH296090 | 2 | COV | 1,320 | 1,320 | 0.36 | 0.53 | 63.11 | 35.76 | 98.86 | 1.40 | 0.66 | 1.42 | 0.66 |
| 21 | VH945409 | 2 | COV | 1,508 | 1,508 | 0.33 | 0.50 | 60.28 | 38.33 | 98.61 | 1.33 | 0.66 | 1.35 | 0.67 |
| 22 | VH945414 | 2 | COV | 1,460 | 1,460 | 0.35 | 0.51 | 63.15 | 35.55 | 98.70 | 1.44 | 0.64 | 1.42 | 0.64 |
| 23 | VH945449 | 2 | COV | 1,562 | 1,562 | 0.33 | 0.48 | 62.04 | 36.68 | 98.72 | 1.45 | 0.64 | 1.42 | 0.63 |
| 24 | VH945517 | 2 | COV | 1,553 | 1,553 | 0.35 | 0.52 | 62.85 | 35.99 | 98.84 | 1.43 | 0.64 | 1.41 | 0.66 |
| 25 | VH945601 | 2 | COV | 1,268 | 1,268 | 0.34 | 0.50 | 62.62 | 35.88 | 98.50 | 1.44 | 0.64 | 1.41 | 0.65 |
| 26 | VH295215 | 4 | DVE | 1,295 | 1,295 | 0.38 | 0.67 | 57.14 | 39.85 | 96.99 | 2.55 | 0.87 | 2.58 | 0.89 |
| 27 | VH295480 | 4 | DVE | 1,400 | 1,400 | 0.34 | 0.63 | 54.36 | 42.00 | 96.36 | 2.50 | 0.88 | 2.51 | 0.89 |
| 28 | VH295740 | 4 | DVE | 1,343 | 1,343 | 0.34 | 0.64 | 53.83 | 41.77 | 95.61 | 2.48 | 0.90 | 2.46 | 0.91 |
| 29 | VH295810 | 4 | DVE | 1,351 | 1,351 | 0.37 | 0.64 | 56.25 | 39.75 | 96.00 | 2.51 | 0.88 | 2.49 | 0.89 |
| 30 | VH295835 | 4 | DVE | 1,454 | 1,454 | 0.38 | 0.66 | 57.43 | 39.48 | 96.91 | 2.55 | 0.88 | 2.57 | 0.88 |
| 31 | VH295900 | 4 | DVE | 1,035 | 1,035 | 0.35 | 0.64 | 54.49 | 41.55 | 96.04 | 2.61 | 0.91 | 2.61 | 0.88 |
| 32 | VH295920 | 4 | DVE | 1,380 | 1,380 | 0.35 | 0.65 | 53.70 | 42.17 | 95.87 | 2.54 | 0.92 | 2.53 | 0.92 |
| 33 | VH296047 | 4 | DVE | 1,315 | 1,315 | 0.36 | 0.65 | 54.68 | 41.22 | 95.89 | 2.58 | 0.91 | 2.55 | 0.91 |
| 34 | VH296090 | 4 | DVE | 1,320 | 1,320 | 0.38 | 0.65 | 56.59 | 39.62 | 96.21 | 2.48 | 0.87 | 2.51 | 0.90 |
| 35 | VH945601 | 4 | DVE | 1,268 | 1,268 | 0.33 | 0.65 | 52.44 | 43.93 | 96.37 | 2.62 | 0.92 | 2.61 | 0.91 |
| 36 | VH295230 | 4 | EEL | 1,507 | 1,507 | 0.35 | 0.65 | 54.28 | 41.74 | 96.02 | 2.29 | 0.91 | 2.31 | 0.92 |
| 37 | VH295238 | 4 | EEL | 1,462 | 1,462 | 0.39 | 0.69 | 56.63 | 39.47 | 96.10 | 2.31 | 0.94 | 2.31 | 0.94 |
| 38 | VH295406 | 4 | EEL | 1,520 | 1,520 | 0.38 | 0.66 | 56.97 | 39.67 | 96.64 | 2.19 | 0.90 | 2.17 | 0.88 |
| 39 | VH295431 | 4 | EEL | 1,563 | 1,563 | 0.38 | 0.65 | 56.69 | 39.54 | 96.23 | 2.28 | 0.87 | 2.30 | 0.90 |
| 40 | VH295452 | 4 | EEL | 1,511 | 1,511 | 0.41 | 0.66 | 58.77 | 37.33 | 96.10 | 2.21 | 0.89 | 2.21 | 0.89 |
| 41 | VH295543 | 4 | EEL | 1,443 | 1,443 | 0.33 | 0.63 | 53.71 | 42.34 | 96.05 | 2.24 | 0.90 | 2.24 | 0.88 |
| 42 | VH295793 | 4 | EEL | 1,422 | 1,422 | 0.32 | 0.62 | 52.60 | 43.04 | 95.64 | 2.41 | 0.89 | 2.37 | 0.91 |
| 43 | VH295971 | 4 | EEL | 1,536 | 1,536 | 0.40 | 0.68 | 58.07 | 38.22 | 96.29 | 2.21 | 0.92 | 2.21 | 0.90 |
| 44 | VH296033 | 4 | EEL | 1,375 | 1,375 | 0.36 | 0.65 | 54.55 | 41.82 | 96.36 | 2.39 | 0.91 | 2.41 | 0.92 |
| 45 | VH296072 | 4 | EEL | 1,500 | 1,500 | 0.36 | 0.63 | 54.40 | 40.33 | 94.73 | 2.37 | 0.93 | 2.36 | 0.92 |
| 46 | VH296081 | 4 | EEL | 1,523 | 1,523 | 0.36 | 0.62 | 56.14 | 39.53 | 95.67 | 2.26 | 0.88 | 2.25 | 0.87 |
| 47 | VH945409 | 4 | EEL | 1,508 | 1,508 | 0.38 | 0.65 | 56.76 | 39.12 | 95.89 | 2.24 | 0.90 | 2.23 | 0.89 |
| 48 | VH945414 | 4 | EEL | 1,460 | 1,460 | 0.36 | 0.64 | 55.21 | 40.62 | 95.82 | 2.25 | 0.89 | 2.25 | 0.91 |
| 49 | VH945449 | 4 | EEL | 1,562 | 1,562 | 0.35 | 0.62 | 54.87 | 41.04 | 95.90 | 2.33 | 0.88 | 2.33 | 0.88 |
| 50 | VH945517 | 4 | EEL | 1,553 | 1,553 | 0.34 | 0.62 | 54.48 | 41.47 | 95.94 | 2.30 | 0.87 | 2.29 | 0.87 |
| 51 | VH295215 | 4 | POR | 1,295 | 1,295 | 0.34 | 0.64 | 54.67 | 42.39 | 97.07 | 2.58 | 0.87 | 2.60 | 0.87 |
| 52 | VH295230 | 4 | POR | 1,507 | 1,507 | 0.36 | 0.67 | 54.94 | 41.67 | 96.62 | 2.29 | 0.92 | 2.29 | 0.92 |
| 53 | VH295238 | 4 | POR | 1,462 | 1,462 | 0.40 | 0.69 | 57.39 | 39.19 | 96.58 | 2.31 | 0.93 | 2.31 | 0.94 |
| 54 | VH295406 | 4 | POR | 1,520 | 1,520 | 0.39 | 0.68 | 57.76 | 39.67 | 97.43 | 2.20 | 0.89 | 2.19 | 0.89 |
| 55 | VH295431 | 4 | POR | 1,563 | 1,563 | 0.39 | 0.67 | 57.65 | 38.84 | 96.48 | 2.25 | 0.88 | 2.29 | 0.90 |
| 56 | VH295452 | 4 | POR | 1,511 | 1,511 | 0.38 | 0.64 | 56.45 | 39.31 | 95.76 | 2.22 | 0.89 | 2.23 | 0.89 |
| 57 | VH295480 | 4 | POR | 1,400 | 1,400 | 0.36 | 0.62 | 56.21 | 40.29 | 96.50 | 2.55 | 0.85 | 2.57 | 0.86 |
| 58 | VH295543 | 4 | POR | 1,443 | 1,443 | 0.34 | 0.64 | 54.05 | 42.13 | 96.19 | 2.19 | 0.90 | 2.22 | 0.89 |
| 59 | VH295740 | 4 | POR | 1,343 | 1,343 | 0.37 | 0.66 | 56.14 | 40.43 | 96.57 | 2.50 | 0.89 | 2.49 | 0.89 |
| 60 | VH295793 | 4 | POR | 1,422 | 1,422 | 0.32 | 0.61 | 52.60 | 43.18 | 95.78 | 2.41 | 0.88 | 2.41 | 0.88 |
| 61 | VH295810 | 4 | POR | 1,351 | 1,351 | 0.37 | 0.65 | 56.25 | 40.56 | 96.82 | 2.55 | 0.87 | 2.53 | 0.88 |
| 62 | VH295835 | 4 | POR | 1,454 | 1,454 | 0.37 | 0.65 | 57.02 | 40.23 | 97.25 | 2.56 | 0.86 | 2.59 | 0.87 |
| 63 | VH295900 | 4 | POR | 1,035 | 1,035 | 0.32 | 0.64 | 52.46 | 44.44 | 96.91 | 2.64 | 0.91 | 2.63 | 0.87 |
| 64 | VH295920 | 4 | POR | 1,380 | 1,380 | 0.35 | 0.65 | 54.28 | 41.81 | 96.09 | 2.60 | 0.92 | 2.58 | 0.92 |
| 65 | VH295971 | 4 | POR | 1,536 | 1,536 | 0.37 | 0.67 | 55.73 | 41.08 | 96.81 | 2.29 | 0.91 | 2.29 | 0.90 |
| 66 | VH296033 | 4 | POR | 1,375 | 1,375 | 0.37 | 0.66 | 55.93 | 40.58 | 96.51 | 2.39 | 0.89 | 2.39 | 0.91 |
| 67 | VH296047 | 4 | POR | 1,315 | 1,315 | 0.33 | 0.63 | 53.46 | 42.81 | 96.27 | 2.62 | 0.90 | 2.59 | 0.88 |
| 68 | VH296072 | 4 | POR | 1,500 | 1,500 | 0.38 | 0.66 | 55.53 | 40.13 | 95.67 | 2.37 | 0.93 | 2.38 | 0.93 |
| 69 | VH296081 | 4 | POR | 1,523 | 1,523 | 0.35 | 0.62 | 55.29 | 41.10 | 96.39 | 2.27 | 0.87 | 2.28 | 0.86 |
| 70 | VH296090 | 4 | POR | 1,320 | 1,320 | 0.34 | 0.65 | 54.92 | 42.65 | 97.58 | 2.52 | 0.85 | 2.57 | 0.88 |
| 71 | VH945409 | 4 | POR | 1,508 | 1,508 | 0.35 | 0.62 | 54.51 | 41.25 | 95.76 | 2.28 | 0.90 | 2.28 | 0.89 |
| 72 | VH945414 | 4 | POR | 1,460 | 1,460 | 0.33 | 0.63 | 52.74 | 43.08 | 95.82 | 2.24 | 0.90 | 2.25 | 0.91 |
| 73 | VH945449 | 4 | POR | 1,562 | 1,562 | 0.33 | 0.62 | 53.65 | 42.38 | 96.03 | 2.30 | 0.88 | 2.30 | 0.89 |
| 74 | VH945517 | 4 | POR | 1,553 | 1,553 | 0.34 | 0.65 | 54.60 | 42.56 | 97.17 | 2.28 | 0.87 | 2.26 | 0.89 |
| 75 | VH945601 | 4 | POR | 1,268 | 1,268 | 0.36 | 0.66 | 55.13 | 41.96 | 97.08 | 2.68 | 0.91 | 2.67 | 0.89 |
| N/A | **AVERAGE** | N/A | N/A | 1,424 | 1,424 | 0.36 | 0.60 | 57.83 | 39.25 | 97.08 | 2.07 | 0.81 | 2.07 | 0.81 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Six—ELA WER

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Dimension Type | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH295663 | 2 | COV | 1,485 | 1,485 | 0.41 | 0.54 | 75.02 | 23.57 | 98.59 | 1.66 | 0.58 | 1.68 | 0.55 |
| 2 | VH295680 | 2 | COV | 1,685 | 1,685 | 0.42 | 0.61 | 73.83 | 24.75 | 98.58 | 1.62 | 0.63 | 1.62 | 0.62 |
| 3 | VH295693 | 2 | COV | 1,406 | 1,406 | 0.46 | 0.56 | 79.30 | 18.85 | 98.15 | 1.70 | 0.56 | 1.73 | 0.53 |
| 4 | VH295754 | 2 | COV | 1,321 | 1,321 | 0.43 | 0.61 | 75.78 | 23.01 | 98.79 | 1.64 | 0.63 | 1.68 | 0.56 |
| 5 | VH295824 | 2 | COV | 1,220 | 1,220 | 0.41 | 0.55 | 77.13 | 21.23 | 98.36 | 1.67 | 0.58 | 1.75 | 0.53 |
| 6 | VH295873 | 2 | COV | 1,317 | 1,317 | 0.46 | 0.58 | 77.75 | 21.49 | 99.24 | 1.68 | 0.55 | 1.70 | 0.53 |
| 7 | VH295936 | 2 | COV | 1,280 | 1,280 | 0.41 | 0.55 | 76.64 | 22.03 | 98.67 | 1.67 | 0.58 | 1.73 | 0.53 |
| 8 | VH296012 | 2 | COV | 1,250 | 1,250 | 0.37 | 0.53 | 71.84 | 26.32 | 98.16 | 1.60 | 0.64 | 1.69 | 0.55 |
| 9 | VH945507 | 2 | COV | 1,748 | 1,748 | 0.45 | 0.63 | 73.80 | 24.77 | 98.57 | 1.59 | 0.64 | 1.58 | 0.65 |
| 10 | VH945512 | 2 | COV | 1,359 | 1,359 | 0.44 | 0.56 | 75.42 | 23.03 | 98.45 | 1.63 | 0.59 | 1.68 | 0.56 |
| 11 | VH945532 | 2 | COV | 1,322 | 1,322 | 0.43 | 0.57 | 77.53 | 21.94 | 99.47 | 1.72 | 0.53 | 1.70 | 0.53 |
| 12 | VH945542 | 2 | COV | 1,749 | 1,749 | 0.42 | 0.59 | 71.81 | 26.99 | 98.80 | 1.60 | 0.62 | 1.59 | 0.63 |
| 13 | VH945547 | 2 | COV | 1,418 | 1,418 | 0.44 | 0.57 | 75.88 | 21.23 | 97.11 | 1.61 | 0.66 | 1.69 | 0.56 |
| 14 | VH295663 | 4 | DVE | 1,485 | 1,485 | 0.53 | 0.75 | 68.35 | 31.04 | 99.39 | 2.42 | 0.84 | 2.35 | 0.81 |
| 15 | VH295873 | 4 | DVE | 1,317 | 1,317 | 0.47 | 0.73 | 64.09 | 34.85 | 98.94 | 2.43 | 0.85 | 2.38 | 0.84 |
| 16 | VH945532 | 4 | DVE | 1,322 | 1,322 | 0.51 | 0.75 | 66.87 | 32.45 | 99.32 | 2.48 | 0.84 | 2.39 | 0.83 |
| 17 | VH295680 | 4 | EEL | 1,685 | 1,685 | 0.48 | 0.70 | 66.65 | 32.28 | 98.93 | 1.85 | 0.80 | 1.80 | 0.76 |
| 18 | VH295693 | 4 | EEL | 1,406 | 1,406 | 0.39 | 0.60 | 63.30 | 35.06 | 98.36 | 1.96 | 0.76 | 1.87 | 0.68 |
| 19 | VH295754 | 4 | EEL | 1,321 | 1,321 | 0.44 | 0.64 | 66.01 | 32.85 | 98.86 | 1.99 | 0.74 | 1.91 | 0.70 |
| 20 | VH295824 | 4 | EEL | 1,220 | 1,220 | 0.43 | 0.59 | 67.87 | 30.74 | 98.61 | 1.92 | 0.68 | 1.87 | 0.64 |
| 21 | VH295936 | 4 | EEL | 1,280 | 1,280 | 0.39 | 0.59 | 62.73 | 34.84 | 97.58 | 2.09 | 0.78 | 1.99 | 0.69 |
| 22 | VH296012 | 4 | EEL | 1,250 | 1,250 | 0.45 | 0.64 | 66.72 | 31.92 | 98.64 | 1.95 | 0.76 | 1.90 | 0.69 |
| 23 | VH945507 | 4 | EEL | 1,748 | 1,748 | 0.48 | 0.69 | 66.53 | 32.15 | 98.68 | 1.87 | 0.79 | 1.83 | 0.77 |
| 24 | VH945512 | 4 | EEL | 1,359 | 1,359 | 0.47 | 0.65 | 67.77 | 30.61 | 98.38 | 1.98 | 0.75 | 1.90 | 0.69 |
| 25 | VH945542 | 4 | EEL | 1,749 | 1,749 | 0.46 | 0.67 | 66.21 | 32.99 | 99.20 | 1.84 | 0.74 | 1.83 | 0.74 |
| 26 | VH945547 | 4 | EEL | 1,418 | 1,418 | 0.45 | 0.66 | 64.03 | 33.43 | 97.46 | 1.96 | 0.83 | 1.93 | 0.78 |
| 27 | VH295663 | 4 | POR | 1,485 | 1,485 | 0.52 | 0.75 | 68.22 | 31.25 | 99.46 | 2.43 | 0.84 | 2.36 | 0.81 |
| 28 | VH295680 | 4 | POR | 1,685 | 1,685 | 0.49 | 0.70 | 67.72 | 31.57 | 99.29 | 1.90 | 0.79 | 1.88 | 0.74 |
| 29 | VH295693 | 4 | POR | 1,406 | 1,406 | 0.40 | 0.60 | 63.94 | 34.42 | 98.36 | 1.95 | 0.75 | 1.87 | 0.68 |
| 30 | VH295754 | 4 | POR | 1,321 | 1,321 | 0.42 | 0.63 | 65.56 | 33.23 | 98.79 | 2.00 | 0.74 | 1.93 | 0.69 |
| 31 | VH295824 | 4 | POR | 1,220 | 1,220 | 0.44 | 0.59 | 67.87 | 30.82 | 98.69 | 1.92 | 0.69 | 1.87 | 0.64 |
| 32 | VH295873 | 4 | POR | 1,317 | 1,317 | 0.47 | 0.73 | 63.78 | 35.00 | 98.79 | 2.43 | 0.85 | 2.38 | 0.86 |
| 33 | VH295936 | 4 | POR | 1,280 | 1,280 | 0.39 | 0.59 | 63.05 | 34.61 | 97.66 | 2.08 | 0.78 | 1.98 | 0.69 |
| 34 | VH296012 | 4 | POR | 1,250 | 1,250 | 0.44 | 0.64 | 66.00 | 32.64 | 98.64 | 1.94 | 0.76 | 1.90 | 0.69 |
| 35 | VH945507 | 4 | POR | 1,748 | 1,748 | 0.51 | 0.71 | 68.71 | 30.38 | 99.08 | 1.92 | 0.78 | 1.91 | 0.75 |
| 36 | VH945512 | 4 | POR | 1,359 | 1,359 | 0.48 | 0.65 | 68.65 | 29.87 | 98.53 | 2.00 | 0.75 | 1.93 | 0.68 |
| 37 | VH945532 | 4 | POR | 1,322 | 1,322 | 0.51 | 0.75 | 66.64 | 32.75 | 99.39 | 2.47 | 0.84 | 2.40 | 0.85 |
| 38 | VH945542 | 4 | POR | 1,749 | 1,749 | 0.48 | 0.69 | 67.75 | 31.73 | 99.49 | 1.87 | 0.75 | 1.86 | 0.73 |
| 39 | VH945547 | 4 | POR | 1,418 | 1,418 | 0.43 | 0.65 | 63.40 | 34.34 | 97.74 | 1.98 | 0.82 | 1.97 | 0.75 |
| N/A | **AVERAGE** | N/A | N/A | 1,428 | 1,428 | 0.45 | 0.64 | 69.23 | 29.41 | 98.65 | 1.92 | 0.72 | 1.90 | 0.68 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Seven—ELA WER

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Dimension Type | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH295266 | 2 | COV | 1,243 | 1,243 | 0.41 | 0.56 | 69.11 | 29.93 | 99.03 | 1.52 | 0.61 | 1.54 | 0.62 |
| 2 | VH295271 | 2 | COV | 1,172 | 1,172 | 0.41 | 0.57 | 69.45 | 30.03 | 99.49 | 1.53 | 0.63 | 1.58 | 0.59 |
| 3 | VH295309 | 2 | COV | 1,162 | 1,162 | 0.46 | 0.60 | 71.51 | 28.14 | 99.66 | 1.52 | 0.61 | 1.53 | 0.61 |
| 4 | VH295321 | 2 | COV | 1,227 | 1,227 | 0.43 | 0.52 | 78.16 | 21.19 | 99.35 | 1.69 | 0.53 | 1.77 | 0.46 |
| 5 | VH295334 | 2 | COV | 1,209 | 1,209 | 0.54 | 0.63 | 82.80 | 16.96 | 99.75 | 1.73 | 0.51 | 1.75 | 0.48 |
| 6 | VH295372 | 2 | COV | 1,146 | 1,146 | 0.46 | 0.55 | 80.54 | 18.85 | 99.39 | 1.73 | 0.50 | 1.77 | 0.47 |
| 7 | VH295398 | 2 | COV | 1,124 | 1,124 | 0.50 | 0.55 | 81.23 | 17.79 | 99.02 | 1.72 | 0.50 | 1.75 | 0.48 |
| 8 | VH295410 | 2 | COV | 1,162 | 1,162 | 0.37 | 0.52 | 69.19 | 30.03 | 99.23 | 1.59 | 0.61 | 1.60 | 0.56 |
| 9 | VH295508 | 2 | COV | 1,180 | 1,180 | 0.36 | 0.53 | 66.69 | 32.46 | 99.15 | 1.52 | 0.63 | 1.56 | 0.60 |
| 10 | VH295528 | 2 | COV | 1,034 | 1,034 | 0.46 | 0.59 | 72.34 | 26.89 | 99.23 | 1.56 | 0.61 | 1.55 | 0.60 |
| 11 | VH295576 | 2 | COV | 1,181 | 1,181 | 0.43 | 0.58 | 68.67 | 30.23 | 98.90 | 1.49 | 0.65 | 1.48 | 0.63 |
| 12 | VH295610 | 2 | COV | 1,223 | 1,223 | 0.40 | 0.55 | 68.19 | 30.99 | 99.18 | 1.53 | 0.62 | 1.52 | 0.61 |
| 13 | VH295636 | 2 | COV | 1,252 | 1,252 | 0.37 | 0.52 | 66.69 | 32.35 | 99.04 | 1.50 | 0.63 | 1.55 | 0.59 |
| 14 | VH295719 | 2 | COV | 1,152 | 1,152 | 0.44 | 0.57 | 71.79 | 27.86 | 99.65 | 1.56 | 0.59 | 1.57 | 0.58 |
| 15 | VH295761 | 2 | COV | 951 | 951 | 0.42 | 0.56 | 72.87 | 26.50 | 99.37 | 1.65 | 0.57 | 1.60 | 0.58 |
| 16 | VH295906 | 2 | COV | 1,221 | 1,221 | 0.43 | 0.54 | 76.90 | 22.69 | 99.59 | 1.69 | 0.53 | 1.72 | 0.51 |
| 17 | VH295943 | 2 | COV | 1,212 | 1,212 | 0.38 | 0.53 | 68.89 | 30.53 | 99.42 | 1.56 | 0.58 | 1.58 | 0.60 |
| 18 | VH296104 | 2 | COV | 1,217 | 1,217 | 0.52 | 0.60 | 80.20 | 19.56 | 99.75 | 1.70 | 0.51 | 1.70 | 0.50 |
| 19 | VH296117 | 2 | COV | 1,183 | 1,183 | 0.40 | 0.54 | 68.05 | 31.02 | 99.07 | 1.49 | 0.63 | 1.54 | 0.60 |
| 20 | VH945434 | 2 | COV | 1,158 | 1,158 | 0.45 | 0.61 | 71.50 | 28.32 | 99.83 | 1.57 | 0.60 | 1.54 | 0.61 |
| 21 | VH945459 | 2 | COV | 1,178 | 1,178 | 0.54 | 0.61 | 82.34 | 17.32 | 99.66 | 1.72 | 0.51 | 1.74 | 0.47 |
| 22 | VH945463 | 2 | COV | 1,236 | 1,236 | 0.43 | 0.49 | 77.99 | 21.28 | 99.27 | 1.71 | 0.51 | 1.75 | 0.46 |
| 23 | VH945527 | 2 | COV | 1,354 | 1,354 | 0.34 | 0.49 | 64.92 | 33.90 | 98.82 | 1.48 | 0.64 | 1.56 | 0.59 |
| 24 | VH945573 | 2 | COV | 1,059 | 1,059 | 0.48 | 0.61 | 73.94 | 25.50 | 99.43 | 1.57 | 0.60 | 1.59 | 0.59 |
| 25 | VH295528 | 4 | DVE | 1,034 | 1,034 | 0.41 | 0.71 | 59.38 | 38.97 | 98.36 | 2.26 | 0.89 | 2.24 | 0.87 |
| 26 | VH295576 | 4 | DVE | 1,181 | 1,181 | 0.48 | 0.75 | 63.08 | 35.14 | 98.22 | 2.30 | 0.94 | 2.21 | 0.87 |
| 27 | VH295610 | 4 | DVE | 1,223 | 1,223 | 0.44 | 0.72 | 61.00 | 37.29 | 98.28 | 2.45 | 0.90 | 2.38 | 0.87 |
| 28 | VH295761 | 4 | DVE | 951 | 951 | 0.45 | 0.72 | 62.67 | 36.38 | 99.05 | 2.32 | 0.86 | 2.30 | 0.84 |
| 29 | VH945434 | 4 | DVE | 1,158 | 1,158 | 0.47 | 0.73 | 63.04 | 35.32 | 98.36 | 2.32 | 0.90 | 2.26 | 0.87 |
| 30 | VH945573 | 4 | DVE | 1,059 | 1,059 | 0.48 | 0.75 | 63.27 | 35.13 | 98.39 | 2.44 | 0.93 | 2.39 | 0.91 |
| 31 | VH295266 | 4 | EEL | 1,243 | 1,243 | 0.48 | 0.66 | 67.18 | 31.05 | 98.23 | 1.87 | 0.78 | 1.78 | 0.71 |
| 32 | VH295271 | 4 | EEL | 1,172 | 1,172 | 0.54 | 0.68 | 72.18 | 26.45 | 98.63 | 1.79 | 0.72 | 1.74 | 0.70 |
| 33 | VH295309 | 4 | EEL | 1,162 | 1,162 | 0.57 | 0.74 | 72.89 | 26.08 | 98.97 | 1.82 | 0.78 | 1.77 | 0.74 |
| 34 | VH295321 | 4 | EEL | 1,227 | 1,227 | 0.53 | 0.73 | 70.42 | 28.85 | 99.27 | 1.92 | 0.76 | 1.91 | 0.78 |
| 35 | VH295334 | 4 | EEL | 1,209 | 1,209 | 0.57 | 0.75 | 72.04 | 27.13 | 99.17 | 2.07 | 0.79 | 2.00 | 0.77 |
| 36 | VH295372 | 4 | EEL | 1,146 | 1,146 | 0.52 | 0.70 | 69.72 | 29.32 | 99.04 | 1.94 | 0.76 | 1.90 | 0.72 |
| 37 | VH295398 | 4 | EEL | 1,124 | 1,124 | 0.49 | 0.71 | 67.35 | 31.67 | 99.02 | 1.90 | 0.77 | 1.89 | 0.78 |
| 38 | VH295410 | 4 | EEL | 1,162 | 1,162 | 0.48 | 0.68 | 67.30 | 31.67 | 98.97 | 1.79 | 0.78 | 1.73 | 0.71 |
| 39 | VH295508 | 4 | EEL | 1,180 | 1,180 | 0.53 | 0.70 | 71.44 | 27.63 | 99.07 | 1.82 | 0.75 | 1.76 | 0.71 |
| 40 | VH295636 | 4 | EEL | 1,252 | 1,252 | 0.52 | 0.70 | 70.77 | 28.27 | 99.04 | 1.85 | 0.75 | 1.76 | 0.71 |
| 41 | VH295719 | 4 | EEL | 1,152 | 1,152 | 0.52 | 0.70 | 70.49 | 28.65 | 99.13 | 1.80 | 0.73 | 1.78 | 0.72 |
| 42 | VH295906 | 4 | EEL | 1,221 | 1,221 | 0.52 | 0.72 | 70.11 | 29.57 | 99.67 | 1.92 | 0.75 | 1.94 | 0.73 |
| 43 | VH295943 | 4 | EEL | 1,212 | 1,212 | 0.53 | 0.67 | 71.78 | 27.06 | 98.84 | 1.81 | 0.70 | 1.75 | 0.68 |
| 44 | VH296104 | 4 | EEL | 1,217 | 1,217 | 0.47 | 0.70 | 65.65 | 33.53 | 99.18 | 2.03 | 0.79 | 2.03 | 0.78 |
| 45 | VH296117 | 4 | EEL | 1,183 | 1,183 | 0.50 | 0.67 | 69.48 | 29.16 | 98.65 | 1.80 | 0.74 | 1.73 | 0.70 |
| 46 | VH945459 | 4 | EEL | 1,178 | 1,178 | 0.54 | 0.75 | 70.37 | 29.29 | 99.66 | 2.02 | 0.77 | 1.98 | 0.78 |
| 47 | VH945463 | 4 | EEL | 1,236 | 1,236 | 0.55 | 0.76 | 70.95 | 28.72 | 99.68 | 1.97 | 0.81 | 1.96 | 0.76 |
| 48 | VH945527 | 4 | EEL | 1,354 | 1,354 | 0.48 | 0.68 | 66.47 | 31.98 | 98.45 | 1.96 | 0.80 | 1.86 | 0.75 |
| 49 | VH295266 | 4 | POR | 1,243 | 1,243 | 0.49 | 0.67 | 68.30 | 30.01 | 98.31 | 1.87 | 0.78 | 1.79 | 0.71 |
| 50 | VH295271 | 4 | POR | 1,172 | 1,172 | 0.53 | 0.68 | 71.25 | 27.56 | 98.81 | 1.80 | 0.72 | 1.75 | 0.69 |
| 51 | VH295309 | 4 | POR | 1,162 | 1,162 | 0.57 | 0.74 | 72.55 | 26.59 | 99.14 | 1.83 | 0.78 | 1.78 | 0.74 |
| 52 | VH295321 | 4 | POR | 1,227 | 1,227 | 0.53 | 0.72 | 70.50 | 28.69 | 99.19 | 1.96 | 0.76 | 1.94 | 0.76 |
| 53 | VH295334 | 4 | POR | 1,209 | 1,209 | 0.59 | 0.77 | 73.61 | 25.81 | 99.42 | 2.09 | 0.78 | 2.02 | 0.76 |
| 54 | VH295372 | 4 | POR | 1,146 | 1,146 | 0.51 | 0.70 | 69.72 | 29.76 | 99.48 | 1.98 | 0.74 | 1.93 | 0.71 |
| 55 | VH295398 | 4 | POR | 1,124 | 1,124 | 0.49 | 0.70 | 67.53 | 31.67 | 99.20 | 1.94 | 0.75 | 1.92 | 0.77 |
| 56 | VH295410 | 4 | POR | 1,162 | 1,162 | 0.47 | 0.68 | 66.87 | 32.19 | 99.05 | 1.81 | 0.78 | 1.74 | 0.71 |
| 57 | VH295508 | 4 | POR | 1,180 | 1,180 | 0.54 | 0.71 | 71.86 | 27.20 | 99.07 | 1.83 | 0.75 | 1.77 | 0.71 |
| 58 | VH295528 | 4 | POR | 1,034 | 1,034 | 0.41 | 0.71 | 58.12 | 39.65 | 97.78 | 2.20 | 0.92 | 2.16 | 0.92 |
| 59 | VH295576 | 4 | POR | 1,181 | 1,181 | 0.47 | 0.75 | 62.91 | 35.31 | 98.22 | 2.30 | 0.95 | 2.20 | 0.88 |
| 60 | VH295610 | 4 | POR | 1,223 | 1,223 | 0.44 | 0.72 | 60.67 | 37.45 | 98.12 | 2.43 | 0.92 | 2.36 | 0.89 |
| 61 | VH295636 | 4 | POR | 1,252 | 1,252 | 0.53 | 0.71 | 71.17 | 27.80 | 98.96 | 1.85 | 0.75 | 1.77 | 0.72 |
| 62 | VH295719 | 4 | POR | 1,152 | 1,152 | 0.53 | 0.69 | 70.75 | 28.13 | 98.87 | 1.81 | 0.74 | 1.79 | 0.72 |
| 63 | VH295761 | 4 | POR | 951 | 951 | 0.45 | 0.72 | 62.46 | 36.38 | 98.84 | 2.31 | 0.86 | 2.28 | 0.86 |
| 64 | VH295906 | 4 | POR | 1,221 | 1,221 | 0.52 | 0.70 | 70.43 | 28.75 | 99.18 | 1.97 | 0.74 | 1.97 | 0.72 |
| 65 | VH295943 | 4 | POR | 1,212 | 1,212 | 0.53 | 0.67 | 71.95 | 26.98 | 98.93 | 1.83 | 0.70 | 1.76 | 0.68 |
| 66 | VH296104 | 4 | POR | 1,217 | 1,217 | 0.49 | 0.71 | 66.97 | 32.13 | 99.10 | 2.05 | 0.78 | 2.06 | 0.78 |
| 67 | VH296117 | 4 | POR | 1,183 | 1,183 | 0.49 | 0.67 | 68.64 | 30.18 | 98.82 | 1.81 | 0.74 | 1.75 | 0.70 |
| 68 | VH945434 | 4 | POR | 1,158 | 1,158 | 0.46 | 0.73 | 62.69 | 35.49 | 98.19 | 2.31 | 0.90 | 2.25 | 0.87 |
| 69 | VH945459 | 4 | POR | 1,178 | 1,178 | 0.54 | 0.74 | 70.80 | 28.78 | 99.58 | 2.02 | 0.77 | 2.00 | 0.77 |
| 70 | VH945463 | 4 | POR | 1,236 | 1,236 | 0.55 | 0.75 | 70.79 | 28.80 | 99.60 | 2.04 | 0.81 | 2.00 | 0.75 |
| 71 | VH945527 | 4 | POR | 1,354 | 1,354 | 0.48 | 0.69 | 66.69 | 31.76 | 98.45 | 1.97 | 0.80 | 1.86 | 0.75 |
| 72 | VH945573 | 4 | POR | 1,059 | 1,059 | 0.47 | 0.75 | 62.23 | 36.17 | 98.39 | 2.43 | 0.93 | 2.38 | 0.91 |
| N/A | **AVERAGE** | N/A | N/A | 1,176 | 1,176 | 0.48 | 0.66 | 69.62 | 29.41 | 99.03 | 1.87 | 0.73 | 1.85 | 0.70 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Eight—ELA WER

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Dimension Type | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater1 Item Score Mean | Rater1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH295279 | 2 | COV | 1,397 | 1,397 | 0.39 | 0.54 | 77.52 | 22.05 | 99.57 | 1.73 | 0.51 | 1.74 | 0.50 |
| 2 | VH295294 | 2 | COV | 1,355 | 1,355 | 0.38 | 0.52 | 77.05 | 22.14 | 99.19 | 1.70 | 0.54 | 1.77 | 0.48 |
| 3 | VH295301 | 2 | COV | 1,185 | 1,185 | 0.42 | 0.53 | 82.36 | 17.38 | 99.75 | 1.78 | 0.47 | 1.83 | 0.41 |
| 4 | VH295357 | 2 | COV | 1,165 | 1,165 | 0.40 | 0.56 | 69.44 | 27.55 | 97.00 | 1.55 | 0.67 | 1.54 | 0.67 |
| 5 | VH295386 | 2 | COV | 1,360 | 1,360 | 0.40 | 0.52 | 76.62 | 22.50 | 99.12 | 1.72 | 0.52 | 1.71 | 0.52 |
| 6 | VH295465 | 2 | COV | 1,183 | 1,183 | 0.41 | 0.60 | 73.03 | 25.78 | 98.82 | 1.62 | 0.62 | 1.62 | 0.62 |
| 7 | VH295486 | 2 | COV | 1,429 | 1,429 | 0.39 | 0.51 | 78.03 | 21.06 | 99.09 | 1.74 | 0.50 | 1.75 | 0.50 |
| 8 | VH295513 | 2 | COV | 1,204 | 1,204 | 0.43 | 0.57 | 75.42 | 23.34 | 98.75 | 1.67 | 0.56 | 1.66 | 0.59 |
| 9 | VH295568 | 2 | COV | 1,148 | 1,148 | 0.42 | 0.56 | 72.74 | 25.35 | 98.08 | 1.59 | 0.61 | 1.63 | 0.61 |
| 10 | VH295596 | 2 | COV | 1,201 | 1,201 | 0.44 | 0.54 | 84.51 | 15.15 | 99.67 | 1.80 | 0.44 | 1.84 | 0.40 |
| 11 | VH295604 | 2 | COV | 1,405 | 1,405 | 0.38 | 0.50 | 76.80 | 22.42 | 99.22 | 1.73 | 0.51 | 1.73 | 0.50 |
| 12 | VH295624 | 2 | COV | 1,386 | 1,386 | 0.37 | 0.52 | 75.69 | 23.67 | 99.35 | 1.72 | 0.52 | 1.72 | 0.52 |
| 13 | VH295768 | 2 | COV | 1,445 | 1,445 | 0.42 | 0.52 | 78.34 | 20.90 | 99.24 | 1.74 | 0.51 | 1.73 | 0.49 |
| 14 | VH295831 | 2 | COV | 1,206 | 1,206 | 0.37 | 0.52 | 71.97 | 25.12 | 97.10 | 1.64 | 0.62 | 1.63 | 0.61 |
| 15 | VH295845 | 2 | COV | 1,387 | 1,387 | 0.43 | 0.53 | 78.15 | 21.05 | 99.21 | 1.73 | 0.51 | 1.72 | 0.51 |
| 16 | VH295978 | 2 | COV | 1,167 | 1,167 | 0.44 | 0.62 | 73.95 | 24.76 | 98.71 | 1.61 | 0.63 | 1.61 | 0.63 |
| 17 | VH296017 | 2 | COV | 1,144 | 1,144 | 0.39 | 0.54 | 72.47 | 25.09 | 97.55 | 1.63 | 0.61 | 1.63 | 0.62 |
| 18 | VH296025 | 2 | COV | 1,145 | 1,145 | 0.47 | 0.63 | 77.03 | 22.27 | 99.30 | 1.66 | 0.58 | 1.65 | 0.58 |
| 19 | VH296059 | 2 | COV | 1,495 | 1,495 | 0.44 | 0.56 | 77.79 | 21.14 | 98.93 | 1.68 | 0.57 | 1.74 | 0.50 |
| 20 | VH296097 | 2 | COV | 1,543 | 1,543 | 0.43 | 0.52 | 78.35 | 20.87 | 99.22 | 1.70 | 0.52 | 1.76 | 0.47 |
| 21 | VH945424 | 2 | COV | 1,182 | 1,182 | 0.38 | 0.53 | 74.03 | 23.77 | 97.80 | 1.66 | 0.59 | 1.67 | 0.59 |
| 22 | VH945497 | 2 | COV | 1,179 | 1,179 | 0.45 | 0.64 | 73.88 | 25.45 | 99.32 | 1.60 | 0.64 | 1.61 | 0.62 |
| 23 | VH945502 | 2 | COV | 1,424 | 1,424 | 0.44 | 0.56 | 78.86 | 20.44 | 99.30 | 1.72 | 0.52 | 1.74 | 0.51 |
| 24 | VH945552 | 2 | COV | 1,522 | 1,522 | 0.48 | 0.60 | 80.75 | 18.73 | 99.47 | 1.71 | 0.54 | 1.76 | 0.47 |
| 25 | VH945593 | 2 | COV | 1,502 | 1,502 | 0.39 | 0.46 | 80.16 | 18.97 | 99.13 | 1.76 | 0.47 | 1.80 | 0.44 |
| 26 | VH295301 | 4 | DVE | 1,185 | 1,185 | 0.48 | 0.75 | 63.54 | 35.02 | 98.57 | 2.61 | 0.92 | 2.59 | 0.90 |
| 27 | VH295596 | 4 | DVE | 1,201 | 1,201 | 0.51 | 0.76 | 65.70 | 33.06 | 98.75 | 2.73 | 0.90 | 2.71 | 0.89 |
| 28 | VH296059 | 4 | DVE | 1,495 | 1,495 | 0.46 | 0.74 | 62.68 | 35.99 | 98.66 | 2.45 | 0.91 | 2.42 | 0.87 |
| 29 | VH296097 | 4 | DVE | 1,543 | 1,543 | 0.52 | 0.77 | 65.91 | 33.05 | 98.96 | 2.46 | 0.91 | 2.45 | 0.89 |
| 30 | VH945552 | 4 | DVE | 1,522 | 1,522 | 0.53 | 0.79 | 66.36 | 32.98 | 99.34 | 2.62 | 0.92 | 2.57 | 0.92 |
| 31 | VH945593 | 4 | DVE | 1,502 | 1,502 | 0.50 | 0.77 | 63.91 | 33.82 | 97.74 | 2.58 | 0.97 | 2.55 | 0.97 |
| 32 | VH295279 | 4 | EEL | 1,397 | 1,397 | 0.53 | 0.74 | 68.86 | 30.42 | 99.28 | 2.19 | 0.81 | 2.16 | 0.81 |
| 33 | VH295294 | 4 | EEL | 1,355 | 1,355 | 0.48 | 0.71 | 65.61 | 33.06 | 98.67 | 2.07 | 0.82 | 2.09 | 0.81 |
| 34 | VH295357 | 4 | EEL | 1,165 | 1,165 | 0.47 | 0.70 | 65.75 | 33.13 | 98.88 | 1.91 | 0.80 | 1.88 | 0.77 |
| 35 | VH295386 | 4 | EEL | 1,360 | 1,360 | 0.52 | 0.73 | 68.53 | 30.81 | 99.34 | 2.17 | 0.79 | 2.15 | 0.79 |
| 36 | VH295465 | 4 | EEL | 1,183 | 1,183 | 0.50 | 0.69 | 68.30 | 30.52 | 98.82 | 1.90 | 0.76 | 1.87 | 0.73 |
| 37 | VH295486 | 4 | EEL | 1,429 | 1,429 | 0.52 | 0.75 | 68.72 | 30.93 | 99.65 | 2.18 | 0.81 | 2.19 | 0.79 |
| 38 | VH295513 | 4 | EEL | 1,204 | 1,204 | 0.43 | 0.65 | 64.53 | 34.55 | 99.09 | 2.00 | 0.74 | 1.87 | 0.72 |
| 39 | VH295568 | 4 | EEL | 1,148 | 1,148 | 0.48 | 0.69 | 66.99 | 32.06 | 99.04 | 1.99 | 0.77 | 1.94 | 0.76 |
| 40 | VH295604 | 4 | EEL | 1,405 | 1,405 | 0.52 | 0.74 | 68.47 | 31.03 | 99.50 | 2.20 | 0.81 | 2.14 | 0.79 |
| 41 | VH295624 | 4 | EEL | 1,386 | 1,386 | 0.53 | 0.73 | 69.41 | 29.58 | 98.99 | 2.06 | 0.80 | 1.99 | 0.76 |
| 42 | VH295768 | 4 | EEL | 1,445 | 1,445 | 0.55 | 0.77 | 70.03 | 29.69 | 99.72 | 2.21 | 0.82 | 2.19 | 0.82 |
| 43 | VH295831 | 4 | EEL | 1,206 | 1,206 | 0.46 | 0.67 | 65.17 | 33.17 | 98.34 | 2.07 | 0.80 | 2.08 | 0.77 |
| 44 | VH295845 | 4 | EEL | 1,387 | 1,387 | 0.55 | 0.74 | 70.66 | 28.41 | 99.06 | 2.06 | 0.79 | 2.05 | 0.79 |
| 45 | VH295978 | 4 | EEL | 1,167 | 1,167 | 0.46 | 0.69 | 65.30 | 33.93 | 99.23 | 1.93 | 0.78 | 1.89 | 0.77 |
| 46 | VH296017 | 4 | EEL | 1,144 | 1,144 | 0.46 | 0.68 | 64.69 | 34.00 | 98.69 | 2.05 | 0.78 | 2.02 | 0.79 |
| 47 | VH296025 | 4 | EEL | 1,145 | 1,145 | 0.44 | 0.65 | 64.19 | 33.45 | 97.64 | 2.02 | 0.80 | 1.88 | 0.74 |
| 48 | VH945424 | 4 | EEL | 1,182 | 1,182 | 0.42 | 0.64 | 62.86 | 35.62 | 98.48 | 2.17 | 0.78 | 2.08 | 0.75 |
| 49 | VH945497 | 4 | EEL | 1,179 | 1,179 | 0.39 | 0.62 | 60.98 | 37.40 | 98.39 | 2.08 | 0.77 | 1.99 | 0.75 |
| 50 | VH945502 | 4 | EEL | 1,424 | 1,424 | 0.43 | 0.67 | 63.55 | 35.39 | 98.95 | 2.15 | 0.78 | 2.13 | 0.76 |
| 51 | VH295279 | 4 | POR | 1,397 | 1,397 | 0.52 | 0.74 | 68.58 | 30.85 | 99.43 | 2.20 | 0.80 | 2.17 | 0.80 |
| 52 | VH295294 | 4 | POR | 1,355 | 1,355 | 0.49 | 0.72 | 66.42 | 32.32 | 98.75 | 2.09 | 0.82 | 2.11 | 0.81 |
| 53 | VH295301 | 4 | POR | 1,185 | 1,185 | 0.48 | 0.75 | 63.46 | 35.02 | 98.48 | 2.60 | 0.92 | 2.57 | 0.89 |
| 54 | VH295357 | 4 | POR | 1,165 | 1,165 | 0.48 | 0.70 | 66.70 | 32.19 | 98.88 | 1.95 | 0.80 | 1.88 | 0.76 |
| 55 | VH295386 | 4 | POR | 1,360 | 1,360 | 0.53 | 0.74 | 69.41 | 30.07 | 99.49 | 2.19 | 0.79 | 2.16 | 0.78 |
| 56 | VH295465 | 4 | POR | 1,183 | 1,183 | 0.49 | 0.68 | 68.22 | 30.77 | 98.99 | 1.92 | 0.75 | 1.91 | 0.72 |
| 57 | VH295486 | 4 | POR | 1,429 | 1,429 | 0.53 | 0.75 | 69.07 | 30.51 | 99.58 | 2.20 | 0.81 | 2.20 | 0.79 |
| 58 | VH295513 | 4 | POR | 1,204 | 1,204 | 0.42 | 0.63 | 64.20 | 34.55 | 98.75 | 2.01 | 0.74 | 1.89 | 0.72 |
| 59 | VH295568 | 4 | POR | 1,148 | 1,148 | 0.51 | 0.70 | 68.73 | 30.23 | 98.95 | 2.01 | 0.77 | 1.94 | 0.74 |
| 60 | VH295596 | 4 | POR | 1,201 | 1,201 | 0.49 | 0.76 | 64.78 | 33.97 | 98.75 | 2.73 | 0.90 | 2.70 | 0.90 |
| 61 | VH295604 | 4 | POR | 1,405 | 1,405 | 0.54 | 0.75 | 69.61 | 29.89 | 99.50 | 2.22 | 0.80 | 2.16 | 0.78 |
| 62 | VH295624 | 4 | POR | 1,386 | 1,386 | 0.54 | 0.74 | 70.13 | 29.15 | 99.28 | 2.07 | 0.80 | 2.00 | 0.76 |
| 63 | VH295768 | 4 | POR | 1,445 | 1,445 | 0.56 | 0.77 | 70.73 | 28.86 | 99.58 | 2.22 | 0.81 | 2.20 | 0.82 |
| 64 | VH295831 | 4 | POR | 1,206 | 1,206 | 0.46 | 0.67 | 65.75 | 32.92 | 98.67 | 2.08 | 0.79 | 2.06 | 0.75 |
| 65 | VH295845 | 4 | POR | 1,387 | 1,387 | 0.56 | 0.75 | 71.30 | 27.90 | 99.21 | 2.07 | 0.80 | 2.05 | 0.78 |
| 66 | VH295978 | 4 | POR | 1,167 | 1,167 | 0.46 | 0.69 | 65.81 | 33.42 | 99.23 | 1.95 | 0.77 | 1.92 | 0.76 |
| 67 | VH296017 | 4 | POR | 1,144 | 1,144 | 0.45 | 0.68 | 64.77 | 34.35 | 99.13 | 2.07 | 0.77 | 2.01 | 0.78 |
| 68 | VH296025 | 4 | POR | 1,145 | 1,145 | 0.44 | 0.65 | 64.19 | 33.80 | 97.99 | 2.04 | 0.79 | 1.91 | 0.74 |
| 69 | VH296059 | 4 | POR | 1,495 | 1,495 | 0.46 | 0.74 | 62.47 | 36.25 | 98.73 | 2.44 | 0.91 | 2.40 | 0.87 |
| 70 | VH296097 | 4 | POR | 1,543 | 1,543 | 0.51 | 0.77 | 65.46 | 33.44 | 98.90 | 2.46 | 0.91 | 2.45 | 0.89 |
| 71 | VH945424 | 4 | POR | 1,182 | 1,182 | 0.41 | 0.63 | 63.03 | 35.19 | 98.22 | 2.18 | 0.78 | 2.05 | 0.73 |
| 72 | VH945497 | 4 | POR | 1,179 | 1,179 | 0.40 | 0.62 | 62.26 | 36.22 | 98.47 | 2.09 | 0.76 | 1.99 | 0.74 |
| 73 | VH945502 | 4 | POR | 1,424 | 1,424 | 0.45 | 0.68 | 64.82 | 34.27 | 99.09 | 2.17 | 0.78 | 2.14 | 0.76 |
| 74 | VH945552 | 4 | POR | 1,522 | 1,522 | 0.52 | 0.79 | 66.03 | 33.25 | 99.28 | 2.62 | 0.92 | 2.56 | 0.91 |
| 75 | VH945593 | 4 | POR | 1,502 | 1,502 | 0.50 | 0.76 | 63.72 | 33.75 | 97.47 | 2.58 | 0.97 | 2.53 | 0.97 |
| N/A | **AVERAGE** | N/A | N/A | 1,310 | 1,310 | 0.46 | 0.66 | 69.67 | 29.22 | 98.89 | 2.03 | 0.73 | 2.01 | 0.71 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings by Two Raters in Human-Scoring Items for Grade Eleven—ELA WER

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Dimension Type | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater1 Item Score Mean | Rater1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH945419 | 2 | COV | 1,431 | 1,431 | 0.36 | 0.54 | 62.47 | 35.08 | 97.55 | 1.41 | 0.70 | 1.40 | 0.70 |
| 2 | VH945469 | 2 | COV | 1,395 | 1,395 | 0.35 | 0.57 | 61.51 | 36.27 | 97.78 | 1.37 | 0.73 | 1.38 | 0.72 |
| 3 | VH945474 | 2 | COV | 1,429 | 1,429 | 0.40 | 0.61 | 64.38 | 34.22 | 98.60 | 1.38 | 0.71 | 1.40 | 0.71 |
| 4 | VH945522 | 2 | COV | 1,390 | 1,390 | 0.42 | 0.61 | 65.32 | 32.59 | 97.91 | 1.38 | 0.72 | 1.38 | 0.73 |
| 5 | VH945537 | 2 | COV | 1,422 | 1,422 | 0.37 | 0.60 | 63.71 | 34.95 | 98.66 | 1.43 | 0.70 | 1.41 | 0.71 |
| 6 | VH945419 | 4 | EEL | 1,431 | 1,431 | 0.45 | 0.73 | 61.01 | 36.97 | 97.97 | 2.18 | 0.94 | 2.16 | 0.92 |
| 7 | VH945469 | 4 | EEL | 1,395 | 1,395 | 0.47 | 0.72 | 62.80 | 34.48 | 97.28 | 2.17 | 0.90 | 2.17 | 0.89 |
| 8 | VH945474 | 4 | EEL | 1,429 | 1,429 | 0.44 | 0.73 | 59.90 | 37.65 | 97.55 | 2.24 | 0.94 | 2.25 | 0.95 |
| 9 | VH945522 | 4 | EEL | 1,390 | 1,390 | 0.43 | 0.71 | 60.22 | 36.76 | 96.98 | 2.10 | 0.91 | 2.10 | 0.92 |
| 10 | VH945537 | 4 | EEL | 1,422 | 1,422 | 0.47 | 0.75 | 62.17 | 35.65 | 97.82 | 2.13 | 0.96 | 2.10 | 0.94 |
| 11 | VH945419 | 4 | POR | 1,431 | 1,431 | 0.46 | 0.72 | 62.33 | 35.64 | 97.97 | 2.31 | 0.90 | 2.29 | 0.89 |
| 12 | VH945469 | 4 | POR | 1,395 | 1,395 | 0.46 | 0.73 | 62.15 | 35.99 | 98.14 | 2.27 | 0.89 | 2.27 | 0.89 |
| 13 | VH945474 | 4 | POR | 1,429 | 1,429 | 0.44 | 0.73 | 59.90 | 37.93 | 97.83 | 2.36 | 0.92 | 2.37 | 0.93 |
| 14 | VH945522 | 4 | POR | 1,390 | 1,390 | 0.45 | 0.73 | 61.73 | 36.40 | 98.13 | 2.23 | 0.89 | 2.24 | 0.91 |
| 15 | VH945537 | 4 | POR | 1,422 | 1,422 | 0.45 | 0.72 | 61.39 | 36.78 | 98.17 | 2.31 | 0.89 | 2.29 | 0.89 |
| N/A | **AVERAGE** | N/A | N/A | 1,413 | 1,413 | 0.43 | 0.68 | 62.07 | 35.82 | 97.89 | 1.95 | 0.85 | 1.95 | 0.85 |

**Notes:**

The following is true for table 8.G.22 through table 8.G.35:

Numbers indicate students who received valid ratings from AI machine (Rater 1).

Rater 2 is the human rater.

Table 8.G. Agreement Statistics Between Artificial Intelligence (AI) and Human Scoring of Short-Answer Items for Grade Three—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH295225 | 2 | 2,203 | 2,203 | 0.41 | 0.60 | 64.64 | 33.91 | 98.55 | 0.66 | 0.71 | 0.59 | 0.70 |
| 2 | VH295343 | 2 | 2,249 | 2,249 | 0.41 | 0.59 | 64.25 | 34.59 | 98.84 | 0.60 | 0.66 | 0.76 | 0.70 |
| 3 | VH295564 | 2 | 2,257 | 2,257 | 0.45 | 0.62 | 64.95 | 33.58 | 98.54 | 0.80 | 0.69 | 0.80 | 0.75 |
| 4 | VH295658 | 2 | 2,235 | 2,235 | 0.42 | 0.64 | 61.34 | 36.20 | 97.54 | 0.98 | 0.80 | 0.69 | 0.76 |
| 5 | VH295674 | 2 | 2,238 | 2,238 | 0.49 | 0.68 | 65.91 | 31.37 | 97.27 | 1.07 | 0.82 | 0.89 | 0.79 |
| 6 | VH295688 | 2 | 2,260 | 2,260 | 0.37 | 0.55 | 67.61 | 27.92 | 95.53 | 0.33 | 0.59 | 0.60 | 0.77 |
| 7 | VH295711 | 2 | 2,275 | 2,275 | 0.36 | 0.57 | 56.79 | 36.09 | 92.88 | 1.06 | 0.91 | 0.87 | 0.80 |
| 8 | VH295877 | 2 | 2,228 | 2,228 | 0.47 | 0.67 | 65.62 | 33.30 | 98.92 | 0.83 | 0.78 | 0.84 | 0.74 |
| 9 | VH295947 | 2 | 2,274 | 2,274 | 0.33 | 0.55 | 55.80 | 40.72 | 96.53 | 1.04 | 0.78 | 0.86 | 0.75 |
| 10 | VH295961 | 2 | 2,212 | 2,212 | 0.37 | 0.57 | 65.24 | 31.33 | 96.56 | 0.45 | 0.67 | 0.62 | 0.75 |
| 11 | VH295995 | 2 | 2,248 | 2,248 | 0.46 | 0.68 | 65.84 | 33.14 | 98.98 | 0.68 | 0.78 | 0.75 | 0.74 |
| N/A | **AVERAGE** | N/A | 2,244 | 2,244 | 0.41 | 0.61 | 63.45 | 33.83 | 97.29 | 0.77 | 0.74 | 0.75 | 0.75 |

Table 8.G. Agreement Statistics Between AI and Human Scoring of Short-Answer Items for Grade Four—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH295257 | 2 | 1,908 | 1,908 | 0.44 | 0.62 | 63.42 | 33.07 | 96.49 | 0.84 | 0.80 | 0.76 | 0.76 |
| 2 | VH295349 | 2 | 1,916 | 1,916 | 0.51 | 0.73 | 67.43 | 31.32 | 98.75 | 1.16 | 0.82 | 1.01 | 0.81 |
| 3 | VH295423 | 2 | 1,937 | 1,937 | 0.53 | 0.73 | 69.44 | 28.45 | 97.88 | 0.81 | 0.79 | 0.85 | 0.85 |
| 4 | VH295492 | 2 | 1,892 | 1,892 | 0.42 | 0.60 | 63.42 | 35.10 | 98.52 | 0.80 | 0.68 | 0.88 | 0.75 |
| 5 | VH295520 | 2 | 1,938 | 1,938 | 0.40 | 0.59 | 59.75 | 36.07 | 95.82 | 1.02 | 0.84 | 0.96 | 0.77 |
| 6 | VH295590 | 2 | 1,920 | 1,920 | 0.42 | 0.65 | 61.35 | 35.36 | 96.72 | 1.20 | 0.86 | 1.03 | 0.79 |
| 7 | VH295629 | 2 | 1,932 | 1,932 | 0.32 | 0.50 | 58.02 | 38.77 | 96.79 | 0.68 | 0.69 | 0.72 | 0.75 |
| 8 | VH295705 | 2 | 1,943 | 1,943 | 0.50 | 0.70 | 67.99 | 30.31 | 98.30 | 0.76 | 0.79 | 0.81 | 0.78 |
| 9 | VH295730 | 2 | 1,937 | 1,937 | 0.57 | 0.76 | 71.45 | 26.74 | 98.19 | 0.92 | 0.85 | 0.92 | 0.82 |
| 10 | VH295779 | 2 | 1,928 | 1,928 | 0.47 | 0.67 | 65.77 | 32.05 | 97.82 | 0.79 | 0.79 | 0.78 | 0.78 |
| 11 | VH295863 | 2 | 1,940 | 1,940 | 0.47 | 0.65 | 69.28 | 27.22 | 96.49 | 0.53 | 0.72 | 0.68 | 0.80 |
| 12 | VH295895 | 2 | 1,944 | 1,944 | 0.39 | 0.59 | 59.41 | 37.09 | 96.50 | 0.90 | 0.80 | 1.06 | 0.76 |
| 13 | VH295954 | 2 | 1,938 | 1,938 | 0.46 | 0.66 | 65.69 | 31.58 | 97.27 | 0.71 | 0.80 | 0.78 | 0.78 |
| N/A | **AVERAGE** | N/A | 1,929 | 1,929 | 0.45 | 0.65 | 64.80 | 32.55 | 97.35 | 0.86 | 0.79 | 0.86 | 0.78 |

Table 8.G. Agreement Statistics Between AI and Human Scoring of Short-Answer Items for Grade Five—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH295229 | 2 | 1,783 | 1,783 | 0.43 | 0.57 | 63.43 | 28.88 | 92.32 | 0.59 | 0.77 | 0.90 | 0.84 |
| 2 | VH295404 | 2 | 1,768 | 1,768 | 0.46 | 0.68 | 64.88 | 31.17 | 96.04 | 0.82 | 0.85 | 0.96 | 0.85 |
| 3 | VH295430 | 2 | 1,786 | 1,786 | 0.43 | 0.66 | 62.60 | 35.72 | 98.32 | 1.12 | 0.83 | 1.19 | 0.74 |
| 4 | VH295450 | 2 | 1,793 | 1,793 | 0.58 | 0.74 | 72.11 | 24.37 | 96.49 | 0.97 | 0.86 | 1.10 | 0.87 |
| 5 | VH295541 | 2 | 1,760 | 1,760 | 0.61 | 0.80 | 74.72 | 23.58 | 98.30 | 0.98 | 0.88 | 1.00 | 0.86 |
| 6 | VH295739 | 2 | 1,798 | 1,798 | 0.37 | 0.61 | 59.18 | 39.82 | 99.00 | 0.84 | 0.74 | 1.02 | 0.74 |
| 7 | VH295807 | 2 | 1,775 | 1,775 | 0.45 | 0.70 | 63.72 | 35.21 | 98.93 | 1.05 | 0.84 | 1.18 | 0.77 |
| 8 | VH295968 | 2 | 1,782 | 1,782 | 0.40 | 0.61 | 59.99 | 37.09 | 97.08 | 0.76 | 0.76 | 1.01 | 0.79 |
| 9 | VH296032 | 2 | 1,799 | 1,799 | 0.48 | 0.69 | 64.98 | 33.85 | 98.83 | 1.00 | 0.83 | 1.05 | 0.75 |
| 10 | VH296044 | 2 | 1,772 | 1,772 | 0.51 | 0.73 | 66.99 | 32.17 | 99.15 | 1.10 | 0.86 | 1.08 | 0.76 |
| 11 | VH296077 | 2 | 1,782 | 1,782 | 0.53 | 0.73 | 68.86 | 29.12 | 97.98 | 0.81 | 0.83 | 1.02 | 0.81 |
| 12 | VH296080 | 2 | 1,765 | 1,765 | 0.39 | 0.61 | 61.47 | 36.71 | 98.19 | 1.27 | 0.79 | 1.31 | 0.72 |
| 13 | VH296088 | 2 | 1,806 | 1,806 | 0.49 | 0.71 | 66.61 | 31.95 | 98.56 | 1.25 | 0.82 | 1.14 | 0.78 |
| N/A | **AVERAGE** | N/A | 1,782 | 1,782 | 0.47 | 0.68 | 65.35 | 32.28 | 97.63 | 0.97 | 0.82 | 1.07 | 0.79 |

Table 8.G. Agreement Statistics Between AI and Human Scoring of Short-Answer Items for Grade Six—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH288262 | 2 | 3,302 | 3,302 | 0.48 | 0.61 | 70.41 | 29.22 | 99.64 | 0.64 | 0.62 | 0.49 | 0.63 |
| 2 | VH288267 | 2 | 4,058 | 4,058 | 0.44 | 0.52 | 70.50 | 29.47 | 99.98 | 0.74 | 0.44 | 0.71 | 0.65 |
| 3 | VH295315 | 2 | 2,342 | 2,342 | 0.38 | 0.60 | 59.95 | 37.36 | 97.31 | 0.87 | 0.76 | 0.53 | 0.71 |
| 4 | VH295437 | 2 | 2,346 | 2,346 | 0.54 | 0.72 | 71.74 | 26.34 | 98.08 | 0.73 | 0.79 | 0.64 | 0.77 |
| 5 | VH295555 | 2 | 2,350 | 2,350 | 0.48 | 0.70 | 65.06 | 33.19 | 98.26 | 1.07 | 0.82 | 0.96 | 0.82 |
| 6 | VH295666 | 2 | 2,367 | 2,367 | 0.52 | 0.72 | 68.10 | 30.42 | 98.52 | 1.03 | 0.83 | 0.88 | 0.76 |
| 7 | VH295677 | 2 | 2,342 | 2,342 | 0.32 | 0.55 | 55.68 | 41.67 | 97.35 | 0.96 | 0.77 | 0.67 | 0.69 |
| 8 | VH295691 | 2 | 2,367 | 2,367 | 0.48 | 0.68 | 66.75 | 32.66 | 99.41 | 0.88 | 0.73 | 0.79 | 0.73 |
| 9 | VH295752 | 2 | 2,324 | 2,324 | 0.28 | 0.49 | 49.61 | 42.08 | 91.70 | 1.21 | 0.78 | 0.69 | 0.77 |
| 10 | VH295821 | 2 | 2,352 | 2,352 | 0.43 | 0.67 | 61.73 | 36.73 | 98.47 | 1.06 | 0.82 | 0.81 | 0.77 |
| 11 | VH295872 | 2 | 2,325 | 2,325 | 0.36 | 0.62 | 56.69 | 40.47 | 97.16 | 1.38 | 0.74 | 0.98 | 0.80 |
| 12 | VH295983 | 2 | 2,359 | 2,359 | 0.45 | 0.67 | 64.86 | 33.70 | 98.56 | 1.39 | 0.74 | 1.14 | 0.78 |
| 13 | VH296037 | 2 | 2,338 | 2,338 | 0.57 | 0.77 | 71.90 | 26.95 | 98.85 | 0.91 | 0.86 | 0.72 | 0.77 |
| 14 | VH296166 | 2 | 2,910 | 2,910 | 0.43 | 0.65 | 64.19 | 35.46 | 99.66 | 0.86 | 0.78 | 0.53 | 0.59 |
| 15 | VH296198 | 2 | 3,529 | 3,529 | 0.52 | 0.66 | 70.53 | 28.31 | 98.84 | 0.87 | 0.72 | 0.70 | 0.64 |
| 16 | VH296306 | 2 | 1,068 | 1,068 | 0.42 | 0.53 | 66.76 | 31.46 | 98.22 | 0.67 | 0.69 | 0.48 | 0.56 |
| 17 | VH296310 | 2 | 2,973 | 2,973 | 0.45 | 0.60 | 64.85 | 33.17 | 98.02 | 1.06 | 0.73 | 0.91 | 0.68 |
| 18 | VH296354 | 2 | 522 | 522 | 0.55 | 0.69 | 73.95 | 26.05 | 100.00 | 0.73 | 0.71 | 0.53 | 0.54 |
| 19 | VH296445 | 2 | 440 | 440 | 0.30 | 0.49 | 62.05 | 36.14 | 98.18 | 0.63 | 0.70 | 0.32 | 0.52 |
| 20 | VH296446 | 2 | 739 | 739 | 0.32 | 0.45 | 63.33 | 36.13 | 99.46 | 0.76 | 0.57 | 0.71 | 0.61 |
| 21 | VH296447 | 2 | 3,804 | 3,804 | 0.50 | 0.63 | 73.16 | 26.79 | 99.95 | 0.88 | 0.61 | 0.72 | 0.58 |
| 22 | VH296451 | 2 | 871 | 871 | 0.65 | 0.71 | 85.88 | 14.12 | 100.00 | 0.30 | 0.49 | 0.27 | 0.49 |
| 23 | VH296454 | 2 | 2,541 | 2,541 | 0.37 | 0.49 | 64.66 | 34.99 | 99.65 | 0.62 | 0.58 | 0.35 | 0.55 |
| 24 | VH296504 | 2 | 961 | 961 | 0.41 | 0.55 | 66.08 | 33.19 | 99.27 | 0.65 | 0.63 | 0.54 | 0.62 |
| 25 | VH296523 | 2 | 899 | 899 | 0.42 | 0.60 | 66.74 | 32.81 | 99.56 | 0.69 | 0.69 | 0.47 | 0.58 |
| 26 | VH296527 | 2 | 517 | 517 | 0.55 | 0.77 | 74.27 | 25.53 | 99.81 | 0.69 | 0.82 | 0.47 | 0.66 |
| 27 | VH296570 | 2 | 3,162 | 3,162 | 0.51 | 0.67 | 68.82 | 30.04 | 98.86 | 0.91 | 0.73 | 0.79 | 0.70 |
| 28 | VH296628 | 2 | 882 | 882 | 0.70 | 0.81 | 81.52 | 18.48 | 100.00 | 0.72 | 0.75 | 0.61 | 0.65 |
| 29 | VH296651 | 2 | 523 | 523 | 0.49 | 0.65 | 70.17 | 29.64 | 99.81 | 0.80 | 0.67 | 0.69 | 0.64 |
| 30 | VH296674 | 2 | 94 | 94 | 0.27 | 0.41 | 56.38 | 41.49 | 97.87 | 0.86 | 0.63 | 0.43 | 0.52 |
| N/A | **AVERAGE** | N/A | 1,987 | 1,987 | 0.45 | 0.62 | 66.88 | 31.80 | 98.68 | 0.85 | 0.71 | 0.65 | 0.66 |

Table 8.G. Agreement Statistics Between AI and Human Scoring of Short-Answer Items for Grade Seven—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH295263 | 2 | 1,917 | 1,917 | 0.53 | 0.74 | 69.17 | 29.73 | 98.90 | 1.24 | 0.79 | 1.04 | 0.80 |
| 2 | VH295270 | 2 | 1,921 | 1,921 | 0.63 | 0.84 | 78.66 | 20.98 | 99.64 | 0.74 | 0.85 | 0.57 | 0.81 |
| 3 | VH295306 | 2 | 1,903 | 1,903 | 0.47 | 0.68 | 64.16 | 34.21 | 98.37 | 1.11 | 0.78 | 0.85 | 0.78 |
| 4 | VH295325 | 2 | 1,922 | 1,922 | 0.42 | 0.64 | 61.91 | 36.73 | 98.65 | 1.13 | 0.76 | 0.97 | 0.76 |
| 5 | VH295339 | 2 | 1,925 | 1,925 | 0.48 | 0.69 | 66.18 | 32.52 | 98.70 | 1.19 | 0.75 | 1.14 | 0.81 |
| 6 | VH295401 | 2 | 1,917 | 1,917 | 0.43 | 0.66 | 61.35 | 36.57 | 97.91 | 1.10 | 0.77 | 0.81 | 0.81 |
| 7 | VH295415 | 2 | 1,947 | 1,947 | 0.52 | 0.60 | 78.48 | 19.31 | 97.79 | 0.31 | 0.53 | 0.40 | 0.64 |
| 8 | VH295505 | 2 | 1,921 | 1,921 | 0.39 | 0.63 | 58.72 | 38.42 | 97.14 | 1.23 | 0.79 | 0.90 | 0.78 |
| 9 | VH295526 | 2 | 1,933 | 1,933 | 0.46 | 0.69 | 65.80 | 33.06 | 98.86 | 0.81 | 0.77 | 0.67 | 0.78 |
| 10 | VH295574 | 2 | 1,905 | 1,905 | 0.45 | 0.65 | 64.09 | 34.28 | 98.37 | 0.93 | 0.75 | 0.76 | 0.75 |
| 11 | VH295635 | 2 | 1,911 | 1,911 | 0.41 | 0.62 | 60.54 | 35.79 | 96.34 | 1.01 | 0.80 | 0.68 | 0.75 |
| 12 | VH295717 | 2 | 1,904 | 1,904 | 0.35 | 0.56 | 56.99 | 39.29 | 96.27 | 0.95 | 0.77 | 0.60 | 0.73 |
| 13 | VH295759 | 2 | 1,894 | 1,894 | 0.41 | 0.63 | 61.19 | 36.33 | 97.52 | 1.24 | 0.74 | 1.03 | 0.82 |
| 14 | VH295909 | 2 | 1,926 | 1,926 | 0.39 | 0.62 | 59.29 | 37.28 | 96.57 | 1.01 | 0.80 | 0.67 | 0.76 |
| 15 | VH295941 | 2 | 1,913 | 1,913 | 0.39 | 0.62 | 58.08 | 38.53 | 96.60 | 1.20 | 0.78 | 0.80 | 0.78 |
| 16 | VH296102 | 2 | 1,912 | 1,912 | 0.45 | 0.68 | 63.96 | 34.47 | 98.43 | 0.94 | 0.80 | 0.68 | 0.75 |
| 17 | VH296116 | 2 | 1,931 | 1,931 | 0.45 | 0.67 | 63.34 | 34.18 | 97.51 | 1.13 | 0.80 | 0.94 | 0.83 |
| 18 | VH296211 | 2 | 291 | 291 | 0.43 | 0.61 | 63.92 | 34.36 | 98.28 | 0.88 | 0.74 | 0.73 | 0.70 |
| 19 | VH297495 | 2 | 477 | 477 | 0.41 | 0.55 | 65.62 | 33.33 | 98.95 | 0.89 | 0.66 | 0.64 | 0.58 |
| 20 | VH297599 | 2 | 448 | 448 | 0.53 | 0.68 | 72.10 | 27.68 | 99.78 | 0.77 | 0.69 | 0.79 | 0.64 |
| 21 | VH297601 | 2 | 1,786 | 1,786 | 0.56 | 0.66 | 76.88 | 22.96 | 99.83 | 0.76 | 0.59 | 0.81 | 0.58 |
| 22 | VH297700 | 2 | 2,794 | 2,794 | 0.49 | 0.63 | 72.80 | 27.17 | 99.96 | 0.95 | 0.60 | 0.74 | 0.57 |
| 23 | VH297722 | 2 | 3,677 | 3,677 | 0.24 | 0.44 | 52.73 | 45.23 | 97.96 | 0.93 | 0.64 | 0.50 | 0.59 |
| 24 | VH297723 | 2 | 2,961 | 2,961 | 0.57 | 0.65 | 79.16 | 20.80 | 99.97 | 0.85 | 0.53 | 0.73 | 0.55 |
| 25 | VH297730 | 2 | 2,403 | 2,403 | 0.46 | 0.62 | 69.50 | 30.46 | 99.96 | 0.94 | 0.66 | 0.71 | 0.56 |
| 26 | VH297739 | 2 | 1,686 | 1,686 | 0.55 | 0.70 | 72.66 | 27.16 | 99.82 | 0.69 | 0.74 | 0.64 | 0.63 |
| 27 | VH297764 | 2 | 399 | 399 | 0.62 | 0.69 | 81.45 | 18.55 | 100.00 | 0.82 | 0.55 | 0.83 | 0.55 |
| 28 | VH297772 | 2 | 349 | 349 | 0.19 | 0.38 | 49.57 | 46.70 | 96.28 | 0.90 | 0.73 | 0.59 | 0.60 |
| 29 | VH297775 | 2 | 1,683 | 1,683 | 0.48 | 0.66 | 68.39 | 31.43 | 99.82 | 1.09 | 0.70 | 0.94 | 0.66 |
| 30 | VH297778 | 2 | 1,896 | 1,896 | 0.53 | 0.65 | 73.68 | 26.11 | 99.79 | 0.86 | 0.65 | 0.73 | 0.58 |
| 31 | VH297781 | 2 | 3,899 | 3,899 | 0.49 | 0.69 | 66.15 | 33.26 | 99.41 | 1.18 | 0.76 | 0.92 | 0.72 |
| 32 | VH297802 | 2 | 2,007 | 2,007 | 0.55 | 0.67 | 75.19 | 24.71 | 99.90 | 0.92 | 0.62 | 0.78 | 0.60 |
| 33 | VH297811 | 2 | 4,163 | 4,163 | 0.57 | 0.74 | 71.70 | 28.08 | 99.78 | 0.95 | 0.81 | 0.80 | 0.65 |
| 34 | VH297845 | 2 | 5,695 | 5,695 | 0.53 | 0.71 | 69.48 | 29.89 | 99.37 | 1.21 | 0.75 | 1.08 | 0.72 |
| 35 | VH297882 | 2 | 429 | 429 | 0.49 | 0.63 | 70.86 | 28.67 | 99.53 | 0.55 | 0.70 | 0.54 | 0.59 |
| 36 | VH297884 | 2 | 1,995 | 1,995 | 0.47 | 0.65 | 67.52 | 32.23 | 99.75 | 0.99 | 0.70 | 0.73 | 0.62 |
| 37 | VH298294 | 2 | 110 | 110 | 0.73 | 0.82 | 90.00 | 10.00 | 100.00 | 0.27 | 0.54 | 0.28 | 0.53 |
| 38 | VH298382 | 2 | 113 | 113 | 0.55 | 0.70 | 74.34 | 24.78 | 99.12 | 0.65 | 0.71 | 0.42 | 0.62 |
| N/A | **AVERAGE** | N/A | 1,891 | 1,891 | 0.48 | 0.65 | 67.78 | 30.93 | 98.71 | 0.93 | 0.71 | 0.75 | 0.68 |

Table 8.G. Agreement Statistics Between AI and Human Scoring of Short-Answer Items for Grade Eight—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH279615 | 2 | 291 | 291 | 0.63 | 0.80 | 75.95 | 24.05 | 100.00 | 0.90 | 0.75 | 0.83 | 0.80 |
| 2 | VH279674 | 2 | 455 | 455 | 0.33 | 0.57 | 58.24 | 41.32 | 99.56 | 1.05 | 0.73 | 0.74 | 0.61 |
| 3 | VH279677 | 2 | 1,351 | 1,351 | 0.57 | 0.73 | 72.39 | 27.02 | 99.41 | 0.93 | 0.74 | 0.86 | 0.72 |
| 4 | VH280208 | 2 | 3,280 | 3,280 | 0.53 | 0.68 | 71.92 | 27.74 | 99.66 | 1.00 | 0.67 | 0.80 | 0.65 |
| 5 | VH280240 | 2 | 2,659 | 2,659 | 0.58 | 0.66 | 78.30 | 21.51 | 99.81 | 0.84 | 0.57 | 0.71 | 0.57 |
| 6 | VH280246 | 2 | 2,206 | 2,206 | 0.47 | 0.54 | 77.11 | 22.80 | 99.91 | 0.91 | 0.44 | 0.76 | 0.54 |
| 7 | VH280252 | 2 | 272 | 272 | 0.41 | 0.59 | 62.87 | 34.56 | 97.43 | 0.72 | 0.73 | 0.75 | 0.76 |
| 8 | VH280255 | 2 | 2,712 | 2,712 | 0.56 | 0.70 | 73.75 | 25.81 | 99.56 | 0.92 | 0.69 | 0.76 | 0.64 |
| 9 | VH280276 | 2 | 3,143 | 3,143 | 0.55 | 0.66 | 74.77 | 25.07 | 99.84 | 0.74 | 0.64 | 0.75 | 0.58 |
| 10 | VH280408 | 2 | 2,047 | 2,047 | 0.26 | 0.42 | 51.29 | 42.55 | 93.84 | 0.92 | 0.83 | 0.71 | 0.66 |
| 11 | VH280500 | 2 | 1,265 | 1,265 | 0.54 | 0.70 | 71.23 | 28.54 | 99.76 | 0.86 | 0.75 | 0.85 | 0.66 |
| 12 | VH280507 | 2 | 397 | 397 | 0.43 | 0.54 | 68.01 | 31.74 | 99.75 | 0.72 | 0.59 | 0.53 | 0.58 |
| 13 | VH280510 | 2 | 870 | 870 | 0.61 | 0.75 | 74.25 | 24.94 | 99.20 | 1.03 | 0.78 | 0.87 | 0.70 |
| 14 | VH280515 | 2 | 4,167 | 4,167 | 0.53 | 0.71 | 69.88 | 29.88 | 99.76 | 0.93 | 0.78 | 0.76 | 0.64 |
| 15 | VH280518 | 2 | 510 | 510 | 0.45 | 0.64 | 63.14 | 35.29 | 98.43 | 1.05 | 0.80 | 0.75 | 0.64 |
| 16 | VH280522 | 2 | 4,634 | 4,634 | 0.33 | 0.58 | 53.84 | 41.45 | 95.30 | 1.18 | 0.80 | 0.70 | 0.75 |
| 17 | VH280685 | 2 | 353 | 353 | 0.52 | 0.65 | 73.65 | 26.35 | 100.00 | 0.94 | 0.61 | 0.74 | 0.59 |
| 18 | VH280871 | 2 | 583 | 583 | 0.38 | 0.52 | 60.89 | 34.99 | 95.88 | 0.85 | 0.72 | 0.51 | 0.66 |
| 19 | VH281168 | 2 | 839 | 839 | 0.57 | 0.71 | 73.78 | 25.86 | 99.64 | 0.81 | 0.69 | 0.87 | 0.69 |
| 20 | VH281238 | 2 | 2,131 | 2,131 | 0.25 | 0.44 | 51.53 | 44.25 | 95.78 | 1.28 | 0.66 | 0.78 | 0.63 |
| 21 | VH281341 | 2 | 95 | 95 | 0.16 | 0.43 | 43.16 | 50.53 | 93.68 | 1.03 | 0.76 | 0.44 | 0.63 |
| 22 | VH281717 | 2 | 96 | 96 | 0.68 | 0.81 | 79.17 | 20.83 | 100.00 | 0.86 | 0.78 | 0.76 | 0.72 |
| 23 | VH282579 | 2 | 91 | 91 | 0.21 | 0.33 | 54.95 | 41.76 | 96.70 | 0.69 | 0.66 | 0.23 | 0.42 |
| 24 | VH282793 | 2 | 90 | 90 | 0.60 | 0.69 | 77.78 | 22.22 | 100.00 | 0.77 | 0.62 | 0.70 | 0.59 |
| 25 | VH283186 | 2 | 110 | 110 | 0.43 | 0.60 | 65.45 | 33.64 | 99.09 | 0.82 | 0.72 | 0.66 | 0.64 |
| 26 | VH295277 | 2 | 1,792 | 1,792 | 0.47 | 0.69 | 65.40 | 32.20 | 97.60 | 1.26 | 0.78 | 1.07 | 0.84 |
| 27 | VH295291 | 2 | 1,804 | 1,804 | 0.44 | 0.65 | 62.64 | 35.92 | 98.56 | 1.14 | 0.78 | 0.90 | 0.74 |
| 28 | VH295298 | 2 | 1,819 | 1,819 | 0.43 | 0.61 | 63.28 | 34.58 | 97.86 | 1.26 | 0.70 | 1.11 | 0.76 |
| 29 | VH295355 | 2 | 1,804 | 1,804 | 0.46 | 0.68 | 63.58 | 34.37 | 97.95 | 1.16 | 0.80 | 0.93 | 0.80 |
| 30 | VH295384 | 2 | 1,799 | 1,799 | 0.57 | 0.77 | 72.60 | 26.63 | 99.22 | 0.77 | 0.78 | 0.74 | 0.81 |
| 31 | VH295463 | 2 | 1,805 | 1,805 | 0.49 | 0.72 | 65.65 | 32.85 | 98.50 | 1.02 | 0.82 | 0.75 | 0.79 |
| 32 | VH295567 | 2 | 1,812 | 1,812 | 0.33 | 0.55 | 55.30 | 39.51 | 94.81 | 0.98 | 0.82 | 0.66 | 0.75 |
| 33 | VH295599 | 2 | 1,792 | 1,792 | 0.52 | 0.73 | 68.64 | 30.52 | 99.16 | 0.92 | 0.78 | 0.77 | 0.79 |
| 34 | VH295601 | 2 | 1,801 | 1,801 | 0.43 | 0.66 | 61.47 | 36.76 | 98.22 | 1.08 | 0.78 | 0.84 | 0.78 |
| 35 | VH295765 | 2 | 1,816 | 1,816 | 0.62 | 0.80 | 75.00 | 24.34 | 99.34 | 1.15 | 0.82 | 1.09 | 0.81 |
| 36 | VH295829 | 2 | 1,799 | 1,799 | 0.60 | 0.74 | 74.82 | 24.74 | 99.56 | 1.00 | 0.68 | 0.85 | 0.73 |
| 37 | VH295843 | 2 | 1,808 | 1,808 | 0.56 | 0.76 | 71.02 | 27.71 | 98.73 | 1.00 | 0.84 | 0.95 | 0.82 |
| 38 | VH295975 | 2 | 1,801 | 1,801 | 0.55 | 0.74 | 70.63 | 28.82 | 99.44 | 0.91 | 0.79 | 0.83 | 0.75 |
| 39 | VH296021 | 2 | 1,807 | 1,807 | 0.48 | 0.71 | 65.19 | 33.31 | 98.51 | 1.16 | 0.83 | 0.97 | 0.79 |
| 40 | VH296023 | 2 | 1,794 | 1,794 | 0.38 | 0.61 | 58.19 | 38.63 | 96.82 | 1.17 | 0.78 | 0.82 | 0.77 |
| 41 | VH296063 | 2 | 1,793 | 1,793 | 0.53 | 0.73 | 69.10 | 29.28 | 98.38 | 0.95 | 0.82 | 0.89 | 0.82 |
| 42 | VH296095 | 2 | 1,808 | 1,808 | 0.33 | 0.60 | 53.54 | 42.48 | 96.02 | 1.29 | 0.76 | 0.82 | 0.81 |
| N/A | **AVERAGE** | N/A | 1,555 | 1,555 | 0.47 | 0.65 | 66.51 | 31.84 | 98.35 | 0.98 | 0.73 | 0.78 | 0.70 |

Table 8.G. Agreement Statistics Between AI and Human Scoring of Short-Answer Items for Grade Eleven—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH279671 | 2 | 1,058 | 1,058 | 0.60 | 0.77 | 73.72 | 25.71 | 99.43 | 1.06 | 0.78 | 0.94 | 0.77 |
| 2 | VH280370 | 2 | 675 | 675 | 0.51 | 0.66 | 69.33 | 29.93 | 99.26 | 1.21 | 0.64 | 1.24 | 0.74 |
| 3 | VH289608 | 2 | 787 | 787 | 0.46 | 0.67 | 64.04 | 34.56 | 98.60 | 0.79 | 0.73 | 1.05 | 0.79 |
| 4 | VH289615 | 2 | 814 | 814 | 0.61 | 0.76 | 74.82 | 24.57 | 99.39 | 1.14 | 0.72 | 1.17 | 0.77 |
| 5 | VH289733 | 2 | 660 | 660 | 0.48 | 0.67 | 67.88 | 31.36 | 99.24 | 0.73 | 0.70 | 0.69 | 0.74 |
| 6 | VH289738 | 2 | 693 | 693 | 0.34 | 0.56 | 57.29 | 41.41 | 98.70 | 0.82 | 0.61 | 1.14 | 0.76 |
| 7 | VH289751 | 2 | 678 | 678 | 0.40 | 0.58 | 63.13 | 35.84 | 98.97 | 0.66 | 0.62 | 0.88 | 0.72 |
| 8 | VH289752 | 2 | 933 | 933 | 0.44 | 0.62 | 63.77 | 34.51 | 98.29 | 1.04 | 0.73 | 0.97 | 0.75 |
| 9 | VH289899 | 2 | 942 | 942 | 0.35 | 0.55 | 59.34 | 36.31 | 95.65 | 0.76 | 0.81 | 0.66 | 0.71 |
| 10 | VH289907 | 2 | 901 | 901 | 0.45 | 0.66 | 64.15 | 33.85 | 98.00 | 0.83 | 0.80 | 0.78 | 0.76 |
| 11 | VH290102 | 2 | 720 | 720 | 0.31 | 0.55 | 55.56 | 43.75 | 99.31 | 0.73 | 0.60 | 1.06 | 0.75 |
| 12 | VH290293 | 2 | 825 | 825 | 0.59 | 0.76 | 73.70 | 26.06 | 99.76 | 0.76 | 0.72 | 0.85 | 0.78 |
| 13 | VH290294 | 2 | 754 | 754 | 0.56 | 0.77 | 78.25 | 20.03 | 98.28 | 0.44 | 0.76 | 0.54 | 0.76 |
| 14 | VH290295 | 2 | 744 | 744 | 0.49 | 0.68 | 67.47 | 32.39 | 99.87 | 0.79 | 0.66 | 1.00 | 0.75 |
| 15 | VH290304 | 2 | 681 | 681 | 0.50 | 0.67 | 69.46 | 30.25 | 99.71 | 0.96 | 0.64 | 0.96 | 0.73 |
| 16 | VH290316 | 2 | 693 | 693 | 0.34 | 0.51 | 59.60 | 39.54 | 99.13 | 0.89 | 0.56 | 1.00 | 0.75 |
| 17 | VH290481 | 2 | 964 | 964 | 0.56 | 0.73 | 71.06 | 27.70 | 98.76 | 1.20 | 0.75 | 1.04 | 0.78 |
| 18 | VH290483 | 2 | 1,075 | 1,075 | 0.54 | 0.74 | 69.86 | 28.56 | 98.42 | 1.24 | 0.80 | 1.13 | 0.82 |
| 19 | VH290486 | 2 | 727 | 727 | 0.49 | 0.64 | 68.36 | 30.95 | 99.31 | 1.21 | 0.62 | 1.12 | 0.73 |
| 20 | VH290487 | 2 | 732 | 732 | 0.38 | 0.57 | 59.43 | 38.25 | 97.68 | 1.10 | 0.77 | 0.88 | 0.69 |
| 21 | VH290488 | 2 | 827 | 827 | 0.53 | 0.70 | 70.01 | 29.75 | 99.76 | 1.03 | 0.68 | 1.07 | 0.75 |
| 22 | VH290517 | 2 | 1,016 | 1,016 | 0.40 | 0.65 | 59.84 | 38.88 | 98.72 | 0.97 | 0.82 | 0.88 | 0.75 |
| 23 | VH290560 | 2 | 755 | 755 | 0.53 | 0.74 | 69.27 | 30.60 | 99.87 | 0.93 | 0.77 | 0.90 | 0.78 |
| 24 | VH290625 | 2 | 924 | 924 | 0.53 | 0.69 | 70.13 | 28.79 | 98.92 | 1.05 | 0.73 | 1.00 | 0.74 |
| 25 | VH290628 | 2 | 987 | 987 | 0.55 | 0.73 | 70.82 | 28.77 | 99.59 | 1.08 | 0.74 | 1.10 | 0.77 |
| 26 | VH290848 | 2 | 858 | 858 | 0.42 | 0.63 | 62.35 | 36.13 | 98.48 | 0.84 | 0.75 | 0.83 | 0.76 |
| 27 | VH290894 | 2 | 1,064 | 1,064 | 0.40 | 0.57 | 60.06 | 36.09 | 96.15 | 1.08 | 0.81 | 1.06 | 0.74 |
| 28 | VH290918 | 2 | 658 | 658 | 0.47 | 0.63 | 66.72 | 32.52 | 99.24 | 0.80 | 0.64 | 0.61 | 0.71 |
| 29 | VH290919 | 2 | 791 | 791 | 0.53 | 0.67 | 70.04 | 28.82 | 98.86 | 1.04 | 0.66 | 0.94 | 0.76 |
| 30 | VH290920 | 2 | 792 | 792 | 0.60 | 0.75 | 73.74 | 25.76 | 99.49 | 0.88 | 0.71 | 0.87 | 0.79 |
| 31 | VH290940 | 2 | 706 | 706 | 0.36 | 0.55 | 62.18 | 37.39 | 99.58 | 0.84 | 0.56 | 0.98 | 0.72 |
| 32 | VH290943 | 2 | 1,095 | 1,095 | 0.53 | 0.72 | 69.32 | 29.68 | 99.00 | 1.04 | 0.76 | 1.03 | 0.78 |
| 33 | VH290944 | 2 | 775 | 775 | 0.46 | 0.60 | 65.94 | 31.35 | 97.29 | 0.77 | 0.73 | 0.74 | 0.72 |
| 34 | VH290946 | 2 | 1,005 | 1,005 | 0.53 | 0.72 | 69.55 | 29.35 | 98.91 | 1.28 | 0.76 | 1.15 | 0.77 |
| 35 | VH290947 | 2 | 773 | 773 | 0.41 | 0.56 | 64.04 | 35.06 | 99.09 | 0.72 | 0.57 | 0.83 | 0.74 |
| 36 | VH290950 | 2 | 707 | 707 | 0.44 | 0.62 | 64.92 | 33.95 | 98.87 | 0.80 | 0.67 | 0.88 | 0.75 |
| 37 | VH291067 | 2 | 4,579 | 4,579 | 0.60 | 0.77 | 74.84 | 24.46 | 99.30 | 0.75 | 0.77 | 0.68 | 0.77 |
| 38 | VH291542 | 2 | 38 | 38 | 0.47 | 0.60 | 68.42 | 28.95 | 97.37 | 0.63 | 0.75 | 0.61 | 0.68 |
| 39 | VH292234 | 2 | 46 | 46 | 0.58 | 0.73 | 73.91 | 26.09 | 100.00 | 0.91 | 0.69 | 0.83 | 0.71 |
| 40 | VH292277 | 2 | 109 | 109 | 0.39 | 0.63 | 59.63 | 39.45 | 99.08 | 1.10 | 0.77 | 0.87 | 0.73 |
| 41 | VH292638 | 2 | 41 | 41 | 0.46 | 0.74 | 65.85 | 34.15 | 100.00 | 0.76 | 0.80 | 0.71 | 0.84 |
| 42 | VH292858 | 2 | 37 | 37 | 0.34 | 0.63 | 59.46 | 37.84 | 97.30 | 0.81 | 0.91 | 0.43 | 0.60 |
| 43 | VH293177 | 2 | 48 | 48 | 0.64 | 0.77 | 79.17 | 20.83 | 100.00 | 0.63 | 0.70 | 0.54 | 0.65 |
| 44 | VH293223 | 2 | 517 | 517 | 0.49 | 0.68 | 67.31 | 31.14 | 98.45 | 0.90 | 0.78 | 0.67 | 0.71 |
| 45 | VH293784 | 2 | 37 | 37 | 0.55 | 0.70 | 72.97 | 27.03 | 100.00 | 0.73 | 0.69 | 0.68 | 0.67 |
| 46 | VH293817 | 2 | 1,822 | 1,822 | 0.57 | 0.73 | 75.14 | 24.48 | 99.62 | 0.53 | 0.66 | 0.62 | 0.73 |
| 47 | VH294012 | 2 | 60 | 60 | 0.42 | 0.66 | 61.67 | 36.67 | 98.33 | 1.25 | 0.79 | 1.02 | 0.79 |
| 48 | VH295243 | 2 | 1,509 | 1,509 | 0.50 | 0.72 | 68.65 | 30.15 | 98.81 | 1.40 | 0.77 | 1.22 | 0.79 |
| 49 | VH295284 | 2 | 1,516 | 1,516 | 0.44 | 0.65 | 67.02 | 30.61 | 97.63 | 1.57 | 0.70 | 1.28 | 0.75 |
| 50 | VH295377 | 2 | 1,512 | 1,512 | 0.51 | 0.73 | 68.19 | 31.15 | 99.34 | 1.22 | 0.79 | 1.21 | 0.79 |
| 51 | VH295390 | 2 | 1,432 | 1,432 | 0.60 | 0.78 | 73.88 | 25.21 | 99.09 | 1.17 | 0.82 | 1.22 | 0.80 |
| 52 | VH295470 | 2 | 1,498 | 1,498 | 0.54 | 0.76 | 71.83 | 27.64 | 99.47 | 1.45 | 0.77 | 1.25 | 0.78 |
| 53 | VH295499 | 2 | 1,493 | 1,493 | 0.51 | 0.71 | 68.52 | 30.01 | 98.53 | 1.23 | 0.79 | 1.25 | 0.79 |
| 54 | VH295538 | 2 | 1,476 | 1,476 | 0.47 | 0.72 | 66.26 | 31.84 | 98.10 | 1.43 | 0.82 | 1.14 | 0.80 |
| 55 | VH295547 | 2 | 1,490 | 1,490 | 0.26 | 0.48 | 49.66 | 45.50 | 95.17 | 0.89 | 0.73 | 1.25 | 0.77 |
| 56 | VH295615 | 2 | 1,505 | 1,505 | 0.53 | 0.74 | 68.70 | 30.03 | 98.74 | 1.19 | 0.84 | 1.04 | 0.79 |
| 57 | VH295649 | 2 | 1,456 | 1,456 | 0.46 | 0.67 | 64.97 | 32.83 | 97.80 | 1.22 | 0.81 | 1.16 | 0.78 |
| 58 | VH295697 | 2 | 1,530 | 1,530 | 0.52 | 0.76 | 70.00 | 29.67 | 99.67 | 1.33 | 0.80 | 1.21 | 0.80 |
| 59 | VH295744 | 2 | 1,491 | 1,491 | 0.55 | 0.75 | 70.62 | 28.10 | 98.73 | 1.25 | 0.80 | 1.12 | 0.82 |
| 60 | VH295802 | 2 | 1,463 | 1,463 | 0.58 | 0.77 | 72.59 | 26.73 | 99.32 | 1.18 | 0.81 | 1.18 | 0.81 |
| 61 | VH295814 | 2 | 1,462 | 1,462 | 0.65 | 0.80 | 76.81 | 22.30 | 99.11 | 1.21 | 0.79 | 1.13 | 0.80 |
| 62 | VH295851 | 2 | 1,500 | 1,500 | 0.47 | 0.69 | 66.07 | 32.93 | 99.00 | 1.31 | 0.75 | 1.15 | 0.77 |
| 63 | VH295887 | 2 | 1,523 | 1,523 | 0.63 | 0.80 | 75.38 | 23.51 | 98.88 | 1.03 | 0.84 | 1.07 | 0.85 |
| 64 | VH295988 | 2 | 1,477 | 1,477 | 0.50 | 0.70 | 67.70 | 31.35 | 99.05 | 1.15 | 0.77 | 1.16 | 0.77 |
| 65 | VH296003 | 2 | 1,458 | 1,458 | 0.51 | 0.71 | 70.10 | 28.05 | 98.15 | 1.44 | 0.76 | 1.24 | 0.79 |
| 66 | VH296052 | 2 | 1,501 | 1,501 | 0.53 | 0.74 | 69.35 | 29.78 | 99.13 | 1.21 | 0.80 | 1.15 | 0.80 |
| N/A | **AVERAGE** | N/A | 991 | 991 | 0.49 | 0.68 | 67.63 | 31.16 | 98.80 | 1.01 | 0.74 | 0.97 | 0.76 |

Table 8.G. Agreement Statistics Between AI and Human Scoring of Short-Answer Items for Grade Three—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH299060 | 1 | 2,512 | 2,512 | 0.80 | 0.80 | 90.33 | 9.67 | 100.00 | 0.57 | 0.49 | 0.56 | 0.50 |
| 2 | VH299294 | 2 | 2,545 | 2,545 | 0.62 | 0.80 | 76.90 | 22.00 | 98.90 | 1.24 | 0.81 | 1.34 | 0.82 |
| 3 | VH299295 | 1 | 2,528 | 2,528 | 0.85 | 0.85 | 93.31 | 6.69 | 100.00 | 0.31 | 0.46 | 0.36 | 0.48 |
| 4 | VH299297 | 2 | 2,534 | 2,534 | 0.86 | 0.94 | 92.27 | 7.10 | 99.37 | 0.68 | 0.87 | 0.67 | 0.87 |
| 5 | VH299352 | 2 | 2,635 | 2,635 | 0.55 | 0.75 | 75.33 | 21.94 | 97.27 | 0.58 | 0.80 | 0.60 | 0.83 |
| 6 | VH299378 | 2 | 2,620 | 2,620 | 0.81 | 0.92 | 90.99 | 8.66 | 99.66 | 0.49 | 0.78 | 0.51 | 0.83 |
| 7 | VH299380 | 1 | 2,588 | 2,588 | 0.74 | 0.74 | 87.09 | 12.91 | 100.00 | 0.61 | 0.49 | 0.55 | 0.50 |
| 8 | VH299381 | 2 | 2,572 | 2,572 | 0.66 | 0.80 | 82.97 | 15.86 | 98.83 | 0.51 | 0.73 | 0.44 | 0.70 |
| 9 | VH299416 | 2 | 2,543 | 2,543 | 0.80 | 0.90 | 93.35 | 5.78 | 99.13 | 0.31 | 0.66 | 0.34 | 0.71 |
| 10 | VH299417 | 2 | 2,520 | 2,520 | 0.73 | 0.85 | 82.78 | 16.51 | 99.29 | 0.75 | 0.79 | 0.74 | 0.82 |
| 11 | VH299467 | 2 | 2,540 | 2,540 | 0.75 | 0.88 | 96.73 | 2.83 | 99.57 | 0.10 | 0.42 | 0.12 | 0.44 |
| 12 | VH299468 | 2 | 2,533 | 2,533 | 0.74 | 0.86 | 83.81 | 15.48 | 99.29 | 0.68 | 0.78 | 0.71 | 0.81 |
| 13 | VH299544 | 1 | 2,655 | 2,655 | 0.81 | 0.81 | 90.81 | 9.19 | 100.00 | 0.44 | 0.50 | 0.39 | 0.49 |
| 14 | VH299560 | 2 | 2,676 | 2,676 | 0.65 | 0.82 | 82.55 | 15.28 | 97.83 | 0.54 | 0.81 | 0.56 | 0.84 |
| 15 | VH299632 | 2 | 2,517 | 2,517 | 0.81 | 0.87 | 88.44 | 10.77 | 99.21 | 0.60 | 0.70 | 0.64 | 0.75 |
| 16 | VH299781 | 2 | 2,522 | 2,522 | 0.80 | 0.87 | 89.18 | 10.07 | 99.25 | 0.51 | 0.70 | 0.54 | 0.73 |
| 17 | VH300000 | 1 | 2,474 | 2,474 | 0.76 | 0.76 | 88.08 | 11.92 | 100.00 | 0.58 | 0.49 | 0.53 | 0.50 |
| 18 | VH300060 | 2 | 2,533 | 2,533 | 0.49 | 0.72 | 66.13 | 32.57 | 98.70 | 1.09 | 0.77 | 1.36 | 0.82 |
| 19 | VH300062 | 1 | 2,509 | 2,509 | 0.86 | 0.86 | 93.82 | 6.18 | 100.00 | 0.34 | 0.47 | 0.37 | 0.48 |
| 20 | VH300063 | 2 | 2,525 | 2,525 | 0.86 | 0.93 | 92.36 | 6.69 | 99.05 | 0.64 | 0.87 | 0.62 | 0.86 |
| 21 | VH300360 | 2 | 2,511 | 2,511 | 0.65 | 0.83 | 80.37 | 19.04 | 99.40 | 0.53 | 0.72 | 0.65 | 0.87 |
| 22 | VH300364 | 1 | 2,480 | 2,480 | 0.76 | 0.76 | 88.02 | 11.98 | 100.00 | 0.60 | 0.49 | 0.52 | 0.50 |
| 23 | VH300365 | 2 | 2,467 | 2,467 | 0.66 | 0.80 | 81.35 | 17.84 | 99.19 | 0.57 | 0.71 | 0.48 | 0.72 |
| N/A | **AVERAGE** | N/A | 2,545 | 2,545 | 0.74 | 0.83 | 86.39 | 12.91 | 99.30 | 0.58 | 0.67 | 0.59 | 0.69 |

Table 8.G. Agreement Statistics Between AI and Human Scoring of Short-Answer Items for Grade Four—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH299182 | 2 | 1,811 | 1,811 | 0.67 | 0.86 | 86.97 | 12.37 | 99.34 | 0.39 | 0.73 | 0.39 | 0.72 |
| 2 | VH299400 | 1 | 1,888 | 1,888 | 0.77 | 0.77 | 90.47 | 9.53 | 100.00 | 0.29 | 0.45 | 0.31 | 0.46 |
| 3 | VH299403 | 2 | 1,868 | 1,868 | 0.80 | 0.90 | 91.43 | 7.23 | 98.66 | 0.48 | 0.81 | 0.48 | 0.81 |
| 4 | VH299506 | 2 | 1,892 | 1,892 | 0.82 | 0.90 | 90.01 | 8.93 | 98.94 | 0.59 | 0.82 | 0.62 | 0.84 |
| 5 | VH299508 | 1 | 1,889 | 1,889 | 0.92 | 0.92 | 95.87 | 4.13 | 100.00 | 0.44 | 0.50 | 0.45 | 0.50 |
| 6 | VH299775 | 2 | 1,914 | 1,914 | 0.67 | 0.85 | 78.11 | 21.26 | 99.37 | 0.91 | 0.84 | 0.98 | 0.92 |
| 7 | VH299823 | 2 | 1,828 | 1,828 | 0.69 | 0.84 | 89.93 | 9.90 | 99.84 | 0.24 | 0.55 | 0.29 | 0.61 |
| 8 | VH299934 | 2 | 1,897 | 1,897 | 0.78 | 0.90 | 91.14 | 8.49 | 99.63 | 0.40 | 0.73 | 0.38 | 0.71 |
| 9 | VH300006 | 2 | 1,820 | 1,820 | 0.74 | 0.74 | 88.96 | 11.04 | 100.00 | 0.29 | 0.45 | 0.32 | 0.47 |
| 10 | VH300008 | 2 | 1,808 | 1,808 | 0.76 | 0.85 | 88.38 | 8.30 | 96.68 | 0.59 | 0.87 | 0.56 | 0.85 |
| 11 | VH300047 | 2 | 1,820 | 1,820 | 0.63 | 0.83 | 86.81 | 11.65 | 98.46 | 0.36 | 0.72 | 0.36 | 0.72 |
| 12 | VH300185 | 2 | 1,852 | 1,852 | 0.79 | 0.90 | 86.61 | 12.69 | 99.30 | 0.88 | 0.89 | 0.87 | 0.88 |
| 13 | VH300219 | 2 | 1,903 | 1,903 | 0.78 | 0.90 | 88.33 | 10.61 | 98.95 | 0.62 | 0.84 | 0.63 | 0.86 |
| 14 | VH300414 | 2 | 1,845 | 1,845 | 0.49 | 0.64 | 72.57 | 17.24 | 89.81 | 0.71 | 0.87 | 0.64 | 0.92 |
| N/A | **AVERAGE** | N/A | 1,860 | 1,860 | 0.74 | 0.84 | 87.54 | 10.96 | 98.50 | 0.51 | 0.72 | 0.52 | 0.73 |

Table 8.G. Agreement Statistics Between AI and Human Scoring of Short-Answer Items for Grade Five—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH299078 | 2 | 2,331 | 2,331 | 0.61 | 0.79 | 83.01 | 15.10 | 98.11 | 0.45 | 0.75 | 0.38 | 0.72 |
| 2 | VH299080 | 2 | 2,313 | 2,313 | 0.52 | 0.74 | 84.13 | 15.09 | 99.22 | 0.23 | 0.54 | 0.31 | 0.64 |
| 3 | VH299081 | 3 | 2,304 | 2,304 | 0.52 | 0.79 | 74.35 | 19.84 | 94.18 | 0.71 | 1.05 | 0.62 | 1.05 |
| 4 | VH299409 | 2 | 2,328 | 2,328 | 0.59 | 0.77 | 76.55 | 23.02 | 99.57 | 0.51 | 0.70 | 0.61 | 0.76 |
| 5 | VH299410 | 1 | 2,309 | 2,309 | 0.28 | 0.28 | 95.54 | 4.46 | 100.00 | 0.01 | 0.12 | 0.05 | 0.22 |
| 6 | VH299433 | 1 | 2,433 | 2,433 | 0.63 | 0.63 | 91.04 | 8.96 | 100.00 | 0.15 | 0.36 | 0.14 | 0.34 |
| 7 | VH299434 | 2 | 2,402 | 2,402 | 0.62 | 0.79 | 75.31 | 23.98 | 99.29 | 0.81 | 0.77 | 0.85 | 0.81 |
| 8 | VH299438 | 2 | 2,428 | 2,428 | 0.70 | 0.81 | 87.27 | 12.19 | 99.46 | 0.35 | 0.62 | 0.33 | 0.60 |
| 9 | VH299595 | 2 | 2,443 | 2,443 | 0.67 | 0.80 | 82.93 | 15.68 | 98.61 | 0.51 | 0.72 | 0.46 | 0.74 |
| 10 | VH299601 | 3 | 2,411 | 2,411 | 0.46 | 0.75 | 70.51 | 23.35 | 93.86 | 0.71 | 1.00 | 0.60 | 1.04 |
| 11 | VH299680 | 1 | 2,319 | 2,319 | 0.80 | 0.80 | 93.45 | 6.55 | 100.00 | 0.20 | 0.40 | 0.21 | 0.41 |
| 12 | VH299683 | 2 | 2,315 | 2,315 | 0.60 | 0.78 | 73.82 | 25.49 | 99.31 | 0.73 | 0.78 | 0.87 | 0.82 |
| 13 | VH299685 | 2 | 2,316 | 2,316 | 0.72 | 0.80 | 88.26 | 11.23 | 99.48 | 0.31 | 0.55 | 0.34 | 0.59 |
| 14 | VH299855 | 2 | 2,467 | 2,467 | 0.55 | 0.73 | 94.00 | 5.84 | 99.84 | 0.09 | 0.34 | 0.09 | 0.35 |
| 15 | VH299857 | 2 | 2,436 | 2,436 | 0.71 | 0.86 | 83.74 | 15.39 | 99.14 | 0.61 | 0.83 | 0.64 | 0.83 |
| 16 | VH299860 | 1 | 2,432 | 2,432 | 0.85 | 0.85 | 96.63 | 3.37 | 100.00 | 0.13 | 0.33 | 0.13 | 0.33 |
| 17 | VH299884 | 2 | 2,326 | 2,326 | 0.68 | 0.83 | 83.88 | 14.92 | 98.80 | 0.51 | 0.74 | 0.47 | 0.77 |
| 18 | VH299985 | 2 | 2,313 | 2,313 | 0.60 | 0.79 | 74.36 | 25.51 | 99.87 | 0.69 | 0.75 | 0.80 | 0.81 |
| 19 | VH299993 | 2 | 2,355 | 2,355 | 0.67 | 0.85 | 81.70 | 17.54 | 99.24 | 0.61 | 0.84 | 0.65 | 0.82 |
| 20 | VH299994 | 2 | 2,352 | 2,352 | 0.75 | 0.90 | 88.39 | 11.14 | 99.53 | 0.50 | 0.80 | 0.51 | 0.82 |
| 21 | VH300075 | 2 | 2,332 | 2,332 | 0.65 | 0.82 | 85.68 | 12.91 | 98.58 | 0.42 | 0.73 | 0.35 | 0.70 |
| 22 | VH300076 | 2 | 2,296 | 2,296 | 0.51 | 0.73 | 83.89 | 15.07 | 98.95 | 0.25 | 0.56 | 0.28 | 0.62 |
| 23 | VH300077 | 3 | 2,293 | 2,293 | 0.49 | 0.79 | 71.78 | 23.51 | 95.29 | 0.69 | 1.00 | 0.65 | 1.06 |
| N/A | **AVERAGE** | N/A | 2,359 | 2,359 | 0.62 | 0.77 | 83.49 | 15.22 | 98.71 | 0.44 | 0.66 | 0.45 | 0.69 |

Table 8.G. Agreement Statistics Between AI and Human Scoring of Short-Answer Items for Grade Six—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH299453 | 2 | 2,732 | 2,732 | 0.45 | 0.65 | 78.84 | 17.83 | 96.67 | 0.25 | 0.60 | 0.42 | 0.71 |
| 2 | VH299518 | 2 | 2,729 | 2,729 | 0.49 | 0.68 | 76.62 | 20.81 | 97.43 | 0.31 | 0.63 | 0.49 | 0.73 |
| 3 | VH299651 | 2 | 2,758 | 2,758 | 0.53 | 0.73 | 77.92 | 19.51 | 97.43 | 0.37 | 0.70 | 0.52 | 0.75 |
| 4 | VH300109 | 2 | 2,852 | 2,852 | 0.48 | 0.65 | 76.54 | 19.00 | 95.55 | 0.30 | 0.66 | 0.52 | 0.75 |
| 5 | VH300153 | 2 | 2,876 | 2,876 | 0.43 | 0.62 | 78.65 | 18.12 | 96.77 | 0.21 | 0.57 | 0.41 | 0.68 |
| 6 | VH300195 | 2 | 2,713 | 2,713 | 0.35 | 0.52 | 74.05 | 21.05 | 95.10 | 0.20 | 0.55 | 0.45 | 0.69 |
| N/A | **AVERAGE** | N/A | 2,777 | 2,777 | 0.46 | 0.64 | 77.10 | 19.39 | 96.49 | 0.27 | 0.62 | 0.47 | 0.72 |

Table 8.G. Agreement Statistics Between AI and Human Scoring of Short-Answer Items for Grade Seven—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH299212 | 1 | 2,672 | 2,672 | 0.28 | 0.28 | 78.82 | 21.18 | 100.00 | 0.07 | 0.26 | 0.26 | 0.44 |
| 2 | VH299923 | 1 | 2,519 | 2,519 | 0.32 | 0.32 | 82.29 | 17.71 | 100.00 | 0.06 | 0.24 | 0.23 | 0.42 |
| N/A | **AVERAGE** | N/A | 2,596 | 2,596 | 0.30 | 0.30 | 80.56 | 19.44 | 100.00 | 0.07 | 0.25 | 0.24 | 0.43 |

Table 8.G. Agreement Statistics Between AI and Human Scoring of Short-Answer Items for Grade Eight—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH299314 | 2 | 2,714 | 2,714 | 0.77 | 0.89 | 90.01 | 9.17 | 99.19 | 0.42 | 0.74 | 0.44 | 0.76 |
| 2 | VH299493 | 2 | 2,774 | 2,774 | 0.63 | 0.82 | 74.95 | 24.80 | 99.75 | 1.14 | 0.80 | 0.94 | 0.88 |
| 3 | VH299711 | 2 | 2,753 | 2,753 | 0.53 | 0.77 | 68.11 | 31.42 | 99.53 | 1.17 | 0.77 | 0.89 | 0.87 |
| 4 | VH299806 | 2 | 2,837 | 2,837 | 0.75 | 0.88 | 88.90 | 10.29 | 99.19 | 0.42 | 0.74 | 0.46 | 0.77 |
| 5 | VH300085 | 2 | 2,745 | 2,745 | 0.64 | 0.84 | 76.79 | 22.51 | 99.31 | 0.92 | 0.91 | 0.87 | 0.86 |
| 6 | VH300245 | 2 | 2,725 | 2,725 | 0.60 | 0.80 | 72.88 | 26.83 | 99.71 | 1.18 | 0.77 | 0.94 | 0.87 |
| N/A | **AVERAGE** | N/A | 2,758 | 2,758 | 0.65 | 0.83 | 78.61 | 20.84 | 99.44 | 0.88 | 0.79 | 0.76 | 0.84 |

Table 8.G. Agreement Statistics Between AI and Human Scoring of Short-Answer Items for Grade Eleven—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH299387 | 3 | 2,842 | 2,842 | 0.56 | 0.84 | 87.16 | 11.44 | 98.59 | 0.31 | 0.75 | 0.29 | 0.74 |
| 2 | VH299552 | 1 | 2,782 | 2,782 | 0.68 | 0.68 | 86.70 | 13.30 | 100.00 | 0.29 | 0.45 | 0.30 | 0.46 |
| 3 | VH299555 | 2 | 2,749 | 2,749 | 0.65 | 0.84 | 89.85 | 9.39 | 99.24 | 0.28 | 0.63 | 0.24 | 0.61 |
| 4 | VH299659 | 1 | 2,761 | 2,761 | 0.54 | 0.54 | 93.59 | 6.41 | 100.00 | 0.06 | 0.23 | 0.09 | 0.29 |
| 5 | VH299662 | 3 | 2,811 | 2,811 | 0.58 | 0.86 | 87.76 | 10.78 | 98.54 | 0.31 | 0.79 | 0.31 | 0.78 |
| 6 | VH299834 | 1 | 2,898 | 2,898 | 0.69 | 0.69 | 87.82 | 12.18 | 100.00 | 0.29 | 0.45 | 0.26 | 0.44 |
| 7 | VH299838 | 2 | 2,837 | 2,837 | 0.49 | 0.70 | 86.18 | 12.27 | 98.45 | 0.28 | 0.60 | 0.16 | 0.49 |
| 8 | VH299905 | 1 | 3,023 | 3,023 | 0.61 | 0.61 | 93.15 | 6.85 | 100.00 | 0.11 | 0.31 | 0.09 | 0.28 |
| 9 | VH299912 | 3 | 3,062 | 3,062 | 0.56 | 0.85 | 88.54 | 10.03 | 98.56 | 0.29 | 0.78 | 0.26 | 0.71 |
| 10 | VH299956 | 1 | 2,644 | 2,644 | 0.60 | 0.60 | 93.23 | 6.77 | 100.00 | 0.09 | 0.29 | 0.10 | 0.30 |
| 11 | VH299965 | 3 | 2,687 | 2,687 | 0.56 | 0.87 | 89.28 | 9.56 | 98.85 | 0.27 | 0.76 | 0.26 | 0.74 |
| 12 | VH299976 | 2 | 2,806 | 2,806 | 0.68 | 0.85 | 81.50 | 18.03 | 99.54 | 0.67 | 0.81 | 0.59 | 0.83 |
| 13 | VH299977 | 2 | 2,817 | 2,817 | 0.51 | 0.63 | 69.65 | 28.04 | 97.69 | 0.67 | 0.63 | 0.87 | 0.75 |
| 14 | VH299980 | 2 | 2,871 | 2,871 | 0.49 | 0.64 | 70.11 | 28.28 | 98.40 | 0.51 | 0.65 | 0.66 | 0.72 |
| 15 | VH300129 | 1 | 2,770 | 2,770 | 0.59 | 0.59 | 93.54 | 6.46 | 100.00 | 0.08 | 0.27 | 0.09 | 0.29 |
| 16 | VH300133 | 3 | 2,784 | 2,784 | 0.59 | 0.87 | 88.15 | 10.42 | 98.56 | 0.30 | 0.76 | 0.32 | 0.80 |
| 17 | VH300174 | 1 | 2,889 | 2,889 | 0.67 | 0.67 | 87.33 | 12.67 | 100.00 | 0.30 | 0.46 | 0.22 | 0.41 |
| 18 | VH300178 | 3 | 2,835 | 2,835 | 0.55 | 0.82 | 86.42 | 11.22 | 97.64 | 0.34 | 0.81 | 0.30 | 0.75 |
| 19 | VH300222 | 2 | 2,940 | 2,940 | 0.71 | 0.86 | 83.40 | 16.26 | 99.66 | 0.61 | 0.78 | 0.59 | 0.81 |
| 20 | VH300224 | 2 | 2,959 | 2,959 | 0.54 | 0.65 | 71.92 | 26.29 | 98.21 | 0.70 | 0.64 | 0.80 | 0.73 |
| 21 | VH300226 | 2 | 3,094 | 3,094 | 0.45 | 0.61 | 67.97 | 29.57 | 97.54 | 0.44 | 0.64 | 0.68 | 0.74 |
| 22 | VH300237 | 2 | 2,959 | 2,959 | 0.70 | 0.80 | 81.11 | 18.15 | 99.26 | 1.08 | 0.71 | 1.02 | 0.74 |
| 23 | VH300238 | 1 | 2,875 | 2,875 | 0.55 | 0.55 | 88.77 | 11.23 | 100.00 | 0.14 | 0.35 | 0.15 | 0.36 |
| 24 | VH300239 | 2 | 2,823 | 2,823 | 0.60 | 0.72 | 87.64 | 12.15 | 99.79 | 0.24 | 0.49 | 0.19 | 0.47 |
| N/A | **AVERAGE** | N/A | 2,855 | 2,855 | 0.59 | 0.72 | 85.03 | 14.07 | 99.10 | 0.36 | 0.59 | 0.37 | 0.59 |

**Notes and Legend:**

The following is true for table 8.G.36 through table 8.G.38:

Numbers indicate students who received valid ratings from AI machine (Rater 1).

Rater 2 is the human rater.

Dimension types are as follows:

* Organization/Purpose (POR)
* Development/Elaboration (DEV)
* Evidence/Elaboration (EEL)
* Convention (COV)

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings Between AI and Human-Scoring Items for Grade Three—ELA WER

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Dimension Type | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH295222 | 2 | COV | 1,646 | 1,646 | 0.21 | 0.40 | 50.49 | 45.38 | 95.87 | 1.15 | 0.71 | 1.07 | 0.71 |
| 2 | VH295344 | 2 | COV | 1,880 | 1,880 | 0.32 | 0.52 | 57.29 | 40.69 | 97.98 | 1.22 | 0.70 | 1.07 | 0.72 |
| 3 | VH295659 | 2 | COV | 1,801 | 1,801 | 0.27 | 0.49 | 55.02 | 43.36 | 98.39 | 1.27 | 0.62 | 1.00 | 0.72 |
| 4 | VH295684 | 2 | COV | 1,480 | 1,480 | 0.39 | 0.56 | 62.64 | 36.15 | 98.78 | 1.12 | 0.67 | 1.02 | 0.70 |
| 5 | VH295880 | 2 | COV | 1,355 | 1,355 | 0.31 | 0.52 | 55.57 | 42.58 | 98.15 | 1.38 | 0.71 | 1.09 | 0.68 |
| 6 | VH295912 | 2 | COV | 1,460 | 1,460 | 0.30 | 0.52 | 54.93 | 42.53 | 97.47 | 1.34 | 0.71 | 1.08 | 0.73 |
| 7 | VH295684 | 4 | DVE | 1,480 | 1,480 | 0.25 | 0.56 | 46.08 | 47.84 | 93.92 | 2.08 | 0.98 | 1.74 | 0.77 |
| 8 | VH295880 | 4 | DVE | 1,355 | 1,355 | 0.27 | 0.59 | 47.53 | 45.83 | 93.36 | 2.13 | 1.04 | 1.84 | 0.81 |
| 9 | VH295222 | 4 | EEL | 1,646 | 1,646 | 0.23 | 0.45 | 52.07 | 43.80 | 95.87 | 1.26 | 0.77 | 1.56 | 0.68 |
| 10 | VH295344 | 4 | EEL | 1,880 | 1,880 | 0.37 | 0.54 | 60.43 | 36.17 | 96.60 | 1.64 | 0.77 | 1.69 | 0.74 |
| 11 | VH295659 | 4 | EEL | 1,801 | 1,801 | 0.36 | 0.54 | 61.91 | 35.59 | 97.50 | 1.47 | 0.69 | 1.62 | 0.71 |
| 12 | VH295912 | 4 | EEL | 1,460 | 1,460 | 0.27 | 0.45 | 55.00 | 40.34 | 95.34 | 1.47 | 0.69 | 1.69 | 0.75 |
| 13 | VH295222 | 4 | POR | 1,646 | 1,646 | 0.26 | 0.45 | 55.04 | 40.83 | 95.87 | 1.20 | 0.73 | 1.55 | 0.68 |
| 14 | VH295344 | 4 | POR | 1,880 | 1,880 | 0.37 | 0.55 | 60.05 | 36.86 | 96.91 | 1.64 | 0.76 | 1.69 | 0.73 |
| 15 | VH295659 | 4 | POR | 1,801 | 1,801 | 0.35 | 0.55 | 59.24 | 37.87 | 97.11 | 1.64 | 0.78 | 1.61 | 0.71 |
| 16 | VH295684 | 4 | POR | 1,480 | 1,480 | 0.22 | 0.56 | 43.45 | 48.78 | 92.23 | 2.21 | 1.04 | 1.80 | 0.78 |
| 17 | VH295880 | 4 | POR | 1,355 | 1,355 | 0.29 | 0.63 | 48.93 | 46.05 | 94.98 | 2.17 | 1.05 | 1.90 | 0.80 |
| 18 | VH295912 | 4 | POR | 1,460 | 1,460 | 0.28 | 0.49 | 54.45 | 41.03 | 95.48 | 1.50 | 0.74 | 1.70 | 0.76 |
| N/A | **AVERAGE** | N/A | N/A | 1,604 | 1,604 | 0.30 | 0.52 | 54.45 | 41.76 | 96.21 | 1.55 | 0.79 | 1.49 | 0.73 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings Between AI and Human-Scoring Items for Grade Six—ELA WER

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Dimension Type | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent Adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH295316 | 2 | COV | 2,161 | 2,161 | 0.28 | 0.49 | 56.41 | 40.81 | 97.22 | 1.24 | 0.71 | 1.59 | 0.63 |
| 2 | VH295439 | 2 | COV | 2,020 | 2,020 | 0.27 | 0.47 | 57.13 | 39.85 | 96.98 | 1.27 | 0.72 | 1.68 | 0.55 |
| 3 | VH295557 | 2 | COV | 2,160 | 2,160 | 0.33 | 0.51 | 62.92 | 32.78 | 95.69 | 1.33 | 0.77 | 1.67 | 0.55 |
| 4 | VH295583 | 2 | COV | 2,219 | 2,219 | 0.35 | 0.53 | 63.32 | 31.91 | 95.22 | 1.32 | 0.80 | 1.61 | 0.60 |
| 5 | VH295984 | 2 | COV | 2,226 | 2,226 | 0.41 | 0.58 | 69.59 | 28.30 | 97.89 | 1.46 | 0.71 | 1.62 | 0.58 |
| 6 | VH296040 | 2 | COV | 2,111 | 2,111 | 0.36 | 0.55 | 65.09 | 31.74 | 96.83 | 1.40 | 0.75 | 1.59 | 0.63 |
| 7 | VH295439 | 4 | DVE | 2,020 | 2,020 | 0.47 | 0.77 | 61.83 | 36.58 | 98.42 | 2.42 | 1.07 | 2.38 | 0.87 |
| 8 | VH295557 | 4 | DVE | 2,160 | 2,160 | 0.40 | 0.74 | 55.74 | 41.06 | 96.81 | 2.68 | 1.15 | 2.52 | 0.88 |
| 9 | VH295316 | 4 | EEL | 2,161 | 2,161 | 0.35 | 0.64 | 55.67 | 40.86 | 96.53 | 2.10 | 0.97 | 1.94 | 0.76 |
| 10 | VH295583 | 4 | EEL | 2,219 | 2,219 | 0.37 | 0.65 | 57.37 | 40.11 | 97.48 | 1.79 | 0.90 | 1.96 | 0.78 |
| 11 | VH295984 | 4 | EEL | 2,226 | 2,226 | 0.54 | 0.73 | 70.35 | 28.80 | 99.15 | 1.96 | 0.77 | 1.94 | 0.78 |
| 12 | VH296040 | 4 | EEL | 2,111 | 2,111 | 0.41 | 0.65 | 61.77 | 37.19 | 98.96 | 2.04 | 0.76 | 1.88 | 0.76 |
| 13 | VH295316 | 4 | POR | 2,161 | 2,161 | 0.36 | 0.65 | 56.50 | 40.31 | 96.81 | 2.01 | 0.98 | 1.94 | 0.75 |
| 14 | VH295439 | 4 | POR | 2,020 | 2,020 | 0.44 | 0.76 | 59.21 | 39.01 | 98.22 | 2.47 | 1.10 | 2.38 | 0.87 |
| 15 | VH295557 | 4 | POR | 2,160 | 2,160 | 0.41 | 0.74 | 56.11 | 40.65 | 96.76 | 2.65 | 1.15 | 2.52 | 0.88 |
| 16 | VH295583 | 4 | POR | 2,219 | 2,219 | 0.37 | 0.68 | 56.24 | 40.74 | 96.98 | 2.05 | 1.02 | 1.96 | 0.78 |
| 17 | VH295984 | 4 | POR | 2,226 | 2,226 | 0.46 | 0.70 | 64.24 | 34.55 | 98.79 | 2.14 | 0.83 | 1.96 | 0.77 |
| 18 | VH296040 | 4 | POR | 2,111 | 2,111 | 0.44 | 0.68 | 64.14 | 35.05 | 99.19 | 2.00 | 0.79 | 1.89 | 0.76 |
| N/A | **AVERAGE** | N/A | N/A | 2,150 | 2,150 | 0.39 | 0.64 | 60.76 | 36.68 | 97.44 | 1.91 | 0.88 | 1.95 | 0.73 |

Table 8.G. Interrater Reliability and Descriptive Statistics for the Ratings Between AI and Human-Scoring Items for Grade Eleven—ELA WER

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prompt | Item ID | Score Points | Dimension Type | Rater 1 N | Rater 2 N | Kappa | Quadratic-Weighted Kappa | Percent Exact | Percent adjacent | Percent Exact + Adjacent | Rater 1 Item Score Mean | Rater 1 Item Score SD | Rater 2 Item Score Mean | Rater 2 Item Score SD |
| 1 | VH295245 | 2 | COV | 1,412 | 1,412 | 0.45 | 0.68 | 65.86 | 32.44 | 98.30 | 1.25 | 0.83 | 1.37 | 0.72 |
| 2 | VH295252 | 2 | COV | 1,389 | 1,389 | 0.43 | 0.65 | 65.95 | 32.76 | 98.70 | 1.38 | 0.78 | 1.38 | 0.70 |
| 3 | VH295286 | 2 | COV | 1,463 | 1,463 | 0.39 | 0.61 | 59.40 | 36.84 | 96.24 | 1.00 | 0.83 | 1.33 | 0.73 |
| 4 | VH295365 | 2 | COV | 1,380 | 1,380 | 0.48 | 0.67 | 67.90 | 29.71 | 97.61 | 1.26 | 0.81 | 1.39 | 0.71 |
| 5 | VH295379 | 2 | COV | 1,442 | 1,442 | 0.41 | 0.62 | 64.22 | 33.50 | 97.71 | 1.33 | 0.80 | 1.39 | 0.69 |
| 6 | VH295391 | 2 | COV | 1,340 | 1,340 | 0.47 | 0.67 | 66.79 | 31.57 | 98.36 | 1.34 | 0.79 | 1.29 | 0.73 |
| 7 | VH295473 | 2 | COV | 1,344 | 1,344 | 0.46 | 0.65 | 68.30 | 29.69 | 97.99 | 1.38 | 0.77 | 1.42 | 0.70 |
| 8 | VH295501 | 2 | COV | 1,373 | 1,373 | 0.42 | 0.64 | 64.68 | 32.70 | 97.38 | 1.29 | 0.82 | 1.39 | 0.72 |
| 9 | VH295533 | 2 | COV | 1,412 | 1,412 | 0.46 | 0.68 | 66.36 | 31.80 | 98.16 | 1.28 | 0.83 | 1.35 | 0.72 |
| 10 | VH295550 | 2 | COV | 1,390 | 1,390 | 0.45 | 0.67 | 65.83 | 32.30 | 98.13 | 1.26 | 0.82 | 1.33 | 0.73 |
| 11 | VH295617 | 2 | COV | 1,417 | 1,417 | 0.41 | 0.63 | 61.75 | 35.99 | 97.74 | 1.11 | 0.81 | 1.35 | 0.72 |
| 12 | VH295652 | 2 | COV | 1,386 | 1,386 | 0.35 | 0.57 | 57.65 | 38.10 | 95.74 | 1.08 | 0.81 | 1.42 | 0.70 |
| 13 | VH295700 | 2 | COV | 1,370 | 1,370 | 0.39 | 0.61 | 62.26 | 34.96 | 97.23 | 1.22 | 0.80 | 1.39 | 0.71 |
| 14 | VH295726 | 2 | COV | 1,371 | 1,371 | 0.32 | 0.55 | 56.31 | 41.28 | 97.59 | 1.09 | 0.76 | 1.36 | 0.70 |
| 15 | VH295747 | 2 | COV | 1,368 | 1,368 | 0.39 | 0.62 | 61.62 | 35.89 | 97.51 | 1.20 | 0.81 | 1.34 | 0.73 |
| 16 | VH295803 | 2 | COV | 1,418 | 1,418 | 0.47 | 0.67 | 67.00 | 31.10 | 98.10 | 1.26 | 0.80 | 1.33 | 0.73 |
| 17 | VH295816 | 2 | COV | 1,354 | 1,354 | 0.40 | 0.61 | 61.74 | 34.49 | 96.23 | 1.16 | 0.84 | 1.36 | 0.72 |
| 18 | VH295852 | 2 | COV | 1,469 | 1,469 | 0.44 | 0.64 | 64.33 | 33.49 | 97.82 | 1.19 | 0.80 | 1.33 | 0.73 |
| 19 | VH295884 | 2 | COV | 1,415 | 1,415 | 0.43 | 0.64 | 64.03 | 32.86 | 96.89 | 1.19 | 0.83 | 1.38 | 0.73 |
| 20 | VH295927 | 2 | COV | 1,423 | 1,423 | 0.44 | 0.67 | 65.64 | 33.38 | 99.02 | 1.28 | 0.78 | 1.36 | 0.73 |
| 21 | VH295990 | 2 | COV | 1,472 | 1,472 | 0.41 | 0.63 | 62.36 | 35.53 | 97.89 | 1.17 | 0.81 | 1.34 | 0.71 |
| 22 | VH296004 | 2 | COV | 1,372 | 1,372 | 0.48 | 0.69 | 68.29 | 30.32 | 98.62 | 1.39 | 0.79 | 1.35 | 0.72 |
| 23 | VH296053 | 2 | COV | 1,367 | 1,367 | 0.44 | 0.65 | 65.98 | 32.63 | 98.61 | 1.31 | 0.78 | 1.37 | 0.70 |
| 24 | VH295245 | 4 | EEL | 1,412 | 1,412 | 0.50 | 0.80 | 63.39 | 35.76 | 99.15 | 2.15 | 1.08 | 2.14 | 0.92 |
| 25 | VH295252 | 4 | EEL | 1,389 | 1,389 | 0.37 | 0.71 | 53.78 | 42.48 | 96.26 | 2.44 | 1.02 | 2.11 | 0.92 |
| 26 | VH295286 | 4 | EEL | 1,463 | 1,463 | 0.45 | 0.78 | 59.54 | 39.23 | 98.77 | 2.11 | 1.06 | 2.10 | 0.95 |
| 27 | VH295365 | 4 | EEL | 1,380 | 1,380 | 0.40 | 0.75 | 55.00 | 41.23 | 96.23 | 2.24 | 1.15 | 2.04 | 0.95 |
| 28 | VH295379 | 4 | EEL | 1,442 | 1,442 | 0.44 | 0.73 | 60.96 | 37.86 | 98.82 | 2.32 | 0.87 | 2.14 | 0.89 |
| 29 | VH295391 | 4 | EEL | 1,340 | 1,340 | 0.42 | 0.73 | 58.88 | 39.85 | 98.73 | 2.06 | 0.88 | 2.04 | 0.94 |
| 30 | VH295473 | 4 | EEL | 1,344 | 1,344 | 0.46 | 0.73 | 61.83 | 36.38 | 98.21 | 2.17 | 0.91 | 2.09 | 0.88 |
| 31 | VH295501 | 4 | EEL | 1,373 | 1,373 | 0.29 | 0.68 | 49.16 | 47.56 | 96.72 | 1.75 | 0.87 | 2.21 | 0.98 |
| 32 | VH295533 | 4 | EEL | 1,412 | 1,412 | 0.50 | 0.77 | 64.45 | 34.42 | 98.87 | 2.24 | 0.90 | 2.20 | 0.93 |
| 33 | VH295550 | 4 | EEL | 1,390 | 1,390 | 0.47 | 0.76 | 61.58 | 35.83 | 97.41 | 2.27 | 1.04 | 2.08 | 0.92 |
| 34 | VH295617 | 4 | EEL | 1,417 | 1,417 | 0.44 | 0.78 | 58.79 | 39.59 | 98.38 | 2.00 | 1.10 | 2.01 | 0.94 |
| 35 | VH295652 | 4 | EEL | 1,386 | 1,386 | 0.37 | 0.71 | 55.70 | 42.86 | 98.56 | 1.80 | 0.84 | 2.12 | 0.94 |
| 36 | VH295700 | 4 | EEL | 1,370 | 1,370 | 0.45 | 0.76 | 59.78 | 38.54 | 98.32 | 2.33 | 1.03 | 2.11 | 0.90 |
| 37 | VH295726 | 4 | EEL | 1,371 | 1,371 | 0.42 | 0.76 | 56.97 | 41.58 | 98.54 | 2.09 | 1.04 | 2.02 | 0.95 |
| 38 | VH295747 | 4 | EEL | 1,368 | 1,368 | 0.41 | 0.77 | 56.21 | 41.59 | 97.81 | 2.03 | 1.15 | 2.04 | 0.94 |
| 39 | VH295803 | 4 | EEL | 1,418 | 1,418 | 0.40 | 0.72 | 55.92 | 40.41 | 96.33 | 2.16 | 1.08 | 2.04 | 0.89 |
| 40 | VH295816 | 4 | EEL | 1,354 | 1,354 | 0.42 | 0.78 | 56.65 | 41.58 | 98.23 | 2.03 | 1.13 | 2.16 | 0.97 |
| 41 | VH295852 | 4 | EEL | 1,469 | 1,469 | 0.46 | 0.76 | 61.27 | 37.64 | 98.91 | 2.15 | 0.95 | 2.14 | 0.93 |
| 42 | VH295884 | 4 | EEL | 1,415 | 1,415 | 0.42 | 0.78 | 56.61 | 42.12 | 98.73 | 2.16 | 1.11 | 2.14 | 0.98 |
| 43 | VH295927 | 4 | EEL | 1,423 | 1,423 | 0.45 | 0.74 | 60.93 | 37.74 | 98.66 | 2.09 | 0.85 | 2.07 | 0.98 |
| 44 | VH295990 | 4 | EEL | 1,472 | 1,472 | 0.44 | 0.76 | 58.90 | 38.79 | 97.69 | 2.19 | 1.08 | 2.12 | 0.93 |
| 45 | VH296004 | 4 | EEL | 1,372 | 1,372 | 0.43 | 0.74 | 58.89 | 38.56 | 97.45 | 2.23 | 1.03 | 2.09 | 0.91 |
| 46 | VH296053 | 4 | EEL | 1,367 | 1,367 | 0.38 | 0.75 | 53.26 | 42.72 | 95.98 | 2.28 | 1.20 | 2.12 | 0.95 |
| 47 | VH295245 | 4 | POR | 1,412 | 1,412 | 0.39 | 0.73 | 57.01 | 41.93 | 98.94 | 1.91 | 0.90 | 2.22 | 0.91 |
| 48 | VH295252 | 4 | POR | 1,389 | 1,389 | 0.47 | 0.76 | 62.42 | 36.36 | 98.78 | 2.32 | 0.92 | 2.25 | 0.92 |
| 49 | VH295286 | 4 | POR | 1,463 | 1,463 | 0.43 | 0.77 | 58.37 | 40.26 | 98.63 | 2.21 | 1.09 | 2.23 | 0.91 |
| 50 | VH295365 | 4 | POR | 1,380 | 1,380 | 0.43 | 0.77 | 58.70 | 40.14 | 98.84 | 2.14 | 1.04 | 2.18 | 0.92 |
| 51 | VH295379 | 4 | POR | 1,442 | 1,442 | 0.44 | 0.71 | 61.03 | 36.96 | 97.99 | 2.38 | 0.90 | 2.24 | 0.87 |
| 52 | VH295391 | 4 | POR | 1,340 | 1,340 | 0.45 | 0.76 | 60.90 | 38.06 | 98.96 | 2.02 | 0.94 | 2.13 | 0.94 |
| 53 | VH295473 | 4 | POR | 1,344 | 1,344 | 0.44 | 0.74 | 60.64 | 38.24 | 98.88 | 2.30 | 0.92 | 2.20 | 0.89 |
| 54 | VH295501 | 4 | POR | 1,373 | 1,373 | 0.33 | 0.72 | 51.78 | 46.54 | 98.32 | 1.90 | 0.92 | 2.30 | 0.95 |
| 55 | VH295533 | 4 | POR | 1,412 | 1,412 | 0.52 | 0.80 | 65.44 | 33.92 | 99.36 | 2.32 | 0.99 | 2.26 | 0.90 |
| 56 | VH295550 | 4 | POR | 1,390 | 1,390 | 0.47 | 0.78 | 61.58 | 36.91 | 98.49 | 2.23 | 1.05 | 2.17 | 0.93 |
| 57 | VH295617 | 4 | POR | 1,417 | 1,417 | 0.46 | 0.78 | 60.97 | 38.04 | 99.01 | 2.02 | 1.03 | 2.12 | 0.90 |
| 58 | VH295652 | 4 | POR | 1,386 | 1,386 | 0.43 | 0.76 | 57.94 | 40.12 | 98.05 | 2.29 | 1.09 | 2.24 | 0.91 |
| 59 | VH295700 | 4 | POR | 1,370 | 1,370 | 0.53 | 0.81 | 66.72 | 32.85 | 99.56 | 2.26 | 0.99 | 2.24 | 0.89 |
| 60 | VH295726 | 4 | POR | 1,371 | 1,371 | 0.43 | 0.76 | 57.62 | 39.97 | 97.59 | 2.23 | 1.09 | 2.19 | 0.93 |
| 61 | VH295747 | 4 | POR | 1,368 | 1,368 | 0.46 | 0.80 | 59.65 | 38.89 | 98.54 | 2.12 | 1.16 | 2.17 | 0.92 |
| 62 | VH295803 | 4 | POR | 1,418 | 1,418 | 0.46 | 0.76 | 61.00 | 37.31 | 98.31 | 2.16 | 1.05 | 2.14 | 0.87 |
| 63 | VH295816 | 4 | POR | 1,354 | 1,354 | 0.41 | 0.79 | 55.69 | 42.69 | 98.38 | 2.25 | 1.19 | 2.23 | 0.96 |
| 64 | VH295852 | 4 | POR | 1,469 | 1,469 | 0.46 | 0.75 | 62.22 | 36.96 | 99.18 | 2.11 | 0.88 | 2.19 | 0.90 |
| 65 | VH295884 | 4 | POR | 1,415 | 1,415 | 0.40 | 0.78 | 54.91 | 43.04 | 97.95 | 2.23 | 1.21 | 2.24 | 0.93 |
| 66 | VH295927 | 4 | POR | 1,423 | 1,423 | 0.46 | 0.76 | 60.37 | 37.95 | 98.31 | 2.33 | 1.01 | 2.23 | 0.94 |
| 67 | VH295990 | 4 | POR | 1,472 | 1,472 | 0.48 | 0.79 | 62.30 | 36.14 | 98.44 | 2.24 | 1.08 | 2.21 | 0.91 |
| 68 | VH296004 | 4 | POR | 1,372 | 1,372 | 0.50 | 0.77 | 64.36 | 34.55 | 98.91 | 2.27 | 0.94 | 2.22 | 0.89 |
| 69 | VH296053 | 4 | POR | 1,367 | 1,367 | 0.41 | 0.76 | 55.01 | 41.33 | 96.34 | 2.31 | 1.21 | 2.18 | 0.92 |
| N/A | **AVERAGE** | N/A | N/A | 1,398 | 1,398 | 0.43 | 0.72 | 60.71 | 37.35 | 98.06 | 1.86 | 0.95 | 1.89 | 0.86 |

### Appendix 8.H: Analyses in Support of Validity Evidence

Table 8.H. Total Testing Time (In Minutes) at Each Ability Level—English Language Arts/Literacy (ELA)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade** | **Ability Level** | **N** | **Mean** | **SD** | **Minimum** | **Maximum** | **Percentile Point 1** | **Percentile Point 10** | **Percentile Point 25** | **Percentile Point 50** | **Percentile Point 75** | **Percentile Point 90** | **Percentile Point 99** |
| 3 | Q 1 | 109,193 | 184.21 | 119.34 | 3.00 | 1,706.01 | 24.46 | 64.93 | 102.36 | 158.77 | 235.94 | 330.61 | 597.16 |
| 3 | Q 2 | 110,259 | 229.55 | 124.49 | 15.06 | 1,957.84 | 60.17 | 106.46 | 144.66 | 202.85 | 282.13 | 381.95 | 665.32 |
| 3 | Q 3 | 110,530 | 237.71 | 124.69 | 32.52 | 1,617.41 | 72.43 | 116.86 | 153.61 | 209.81 | 287.59 | 389.29 | 681.91 |
| 3 | Q 4 | 110,050 | 232.89 | 121.26 | 32.18 | 2,022.72 | 76.38 | 117.06 | 151.58 | 204.97 | 280.73 | 379.83 | 666.75 |
| 4 | Q 1 | 107,848 | 198.69 | 126.47 | 3.82 | 1,666.85 | 25.22 | 70.87 | 111.18 | 171.85 | 255.00 | 357.73 | 633.44 |
| 4 | Q 2 | 107,691 | 244.26 | 131.14 | 18.74 | 2,527.86 | 66.47 | 114.28 | 154.27 | 215.52 | 301.15 | 408.00 | 697.23 |
| 4 | Q 3 | 108,355 | 251.12 | 131.40 | 27.10 | 2,428.87 | 77.03 | 123.22 | 162.10 | 221.64 | 304.95 | 412.81 | 716.38 |
| 4 | Q 4 | 108,969 | 245.92 | 127.12 | 31.92 | 2,747.42 | 81.20 | 124.42 | 160.96 | 216.93 | 296.22 | 398.73 | 698.70 |
| 5 | Q 1 | 112,841 | 196.77 | 124.35 | 2.33 | 2,064.66 | 24.46 | 72.68 | 111.99 | 169.93 | 251.00 | 352.67 | 621.16 |
| 5 | Q 2 | 112,002 | 243.58 | 130.23 | 18.54 | 2,091.83 | 68.50 | 115.77 | 154.73 | 214.63 | 298.79 | 404.55 | 695.99 |
| 5 | Q 3 | 114,337 | 246.16 | 128.92 | 22.86 | 1,666.43 | 77.08 | 121.74 | 158.96 | 216.70 | 298.53 | 404.37 | 700.60 |
| 5 | Q 4 | 113,061 | 241.13 | 122.89 | 36.08 | 1,848.46 | 82.45 | 124.05 | 158.74 | 212.48 | 289.24 | 389.79 | 677.98 |
| 6 | Q 1 | 112,025 | 207.72 | 133.91 | 2.85 | 1,834.45 | 26.75 | 76.48 | 117.46 | 177.10 | 263.73 | 374.14 | 677.11 |
| 6 | Q 2 | 113,728 | 262.40 | 142.67 | 19.53 | 2,003.98 | 73.92 | 124.47 | 165.19 | 229.68 | 321.47 | 436.47 | 768.03 |
| 6 | Q 3 | 112,987 | 270.94 | 141.04 | 33.80 | 2,028.60 | 89.18 | 136.56 | 175.84 | 238.00 | 327.47 | 443.24 | 770.16 |
| 6 | Q 4 | 113,370 | 269.28 | 133.46 | 41.38 | 2,307.75 | 97.22 | 143.35 | 180.02 | 238.16 | 321.40 | 431.47 | 747.06 |
| 7 | Q 1 | 116,076 | 179.76 | 112.12 | 2.17 | 1,734.04 | 22.65 | 67.31 | 103.78 | 155.57 | 229.11 | 319.62 | 568.21 |
| 7 | Q 2 | 116,057 | 230.52 | 120.06 | 13.93 | 2,215.97 | 67.42 | 112.60 | 148.70 | 203.84 | 281.59 | 379.47 | 652.92 |
| 7 | Q 3 | 116,973 | 245.38 | 120.55 | 28.94 | 1,959.34 | 84.54 | 129.34 | 164.50 | 218.66 | 293.28 | 391.57 | 679.62 |
| 7 | Q 4 | 118,271 | 254.97 | 118.51 | 42.80 | 2,230.28 | 97.38 | 141.84 | 176.77 | 229.34 | 300.58 | 395.85 | 683.65 |
| 8 | Q 1 | 113,802 | 174.27 | 109.84 | 2.03 | 1,854.73 | 18.35 | 62.92 | 99.61 | 151.03 | 222.89 | 313.21 | 546.73 |
| 8 | Q 2 | 115,549 | 228.06 | 119.23 | 16.19 | 1,914.23 | 64.93 | 110.67 | 147.16 | 201.64 | 279.07 | 374.64 | 638.55 |
| 8 | Q 3 | 114,010 | 243.15 | 118.35 | 29.28 | 2,281.73 | 83.95 | 128.97 | 163.37 | 216.05 | 291.78 | 388.15 | 656.83 |
| 8 | Q 4 | 116,049 | 252.74 | 118.27 | 42.57 | 1,837.16 | 96.96 | 140.94 | 174.82 | 226.15 | 298.01 | 392.81 | 678.96 |
| 11 | Q 1 | 108,541 | 119.24 | 79.31 | 1.00 | 1,212.76 | 7.71 | 35.08 | 63.75 | 105.20 | 156.67 | 216.66 | 382.86 |
| 11 | Q 2 | 110,223 | 175.69 | 86.71 | 3.22 | 1,778.54 | 48.00 | 87.42 | 118.37 | 159.93 | 212.41 | 280.24 | 473.78 |
| 11 | Q 3 | 109,080 | 199.33 | 89.17 | 18.48 | 1,757.29 | 70.76 | 111.56 | 141.60 | 181.40 | 235.29 | 306.18 | 511.45 |
| 11 | Q 4 | 109,756 | 207.20 | 84.66 | 33.87 | 1,882.93 | 86.55 | 126.54 | 153.87 | 189.30 | 238.69 | 307.21 | 510.44 |

Table 8.H. Total Testing Time (In Minutes) at Each Ability Level—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade** | **Ability Level** | **N** | **Mean** | **SD** | **Minimum** | **Maximum** | **Percentile Point 1** | **Percentile Point 10** | **Percentile Point 25** | **Percentile Point 50** | **Percentile Point 75** | **Percentile Point 90** | **Percentile Point 99** |
| 3 | Q 1 | 109,743 | 116.30 | 75.52 | 2.38 | 1,607.43 | 19.50 | 45.16 | 66.26 | 98.18 | 145.27 | 208.04 | 387.38 |
| 3 | Q 2 | 109,464 | 138.53 | 81.99 | 11.29 | 1,711.11 | 39.51 | 63.70 | 84.24 | 117.61 | 169.10 | 237.08 | 435.11 |
| 3 | Q 3 | 111,059 | 147.97 | 84.38 | 23.20 | 1,759.03 | 45.93 | 70.72 | 92.31 | 126.80 | 179.14 | 249.12 | 449.99 |
| 3 | Q 4 | 110,196 | 147.47 | 85.14 | 19.59 | 1,399.44 | 46.68 | 70.20 | 90.94 | 125.34 | 179.18 | 249.60 | 462.86 |
| 4 | Q 1 | 107,042 | 123.30 | 78.70 | 2.69 | 1,807.08 | 20.55 | 48.97 | 71.07 | 104.55 | 154.05 | 220.22 | 401.88 |
| 4 | Q 2 | 108,218 | 142.99 | 82.53 | 9.67 | 2,387.93 | 41.81 | 66.43 | 87.91 | 122.29 | 174.35 | 243.90 | 437.54 |
| 4 | Q 3 | 109,222 | 151.43 | 86.21 | 22.43 | 2,444.79 | 46.75 | 72.48 | 94.56 | 129.78 | 184.27 | 253.88 | 460.67 |
| 4 | Q 4 | 108,278 | 154.52 | 88.41 | 14.18 | 1,949.63 | 49.18 | 74.50 | 96.44 | 132.40 | 186.89 | 258.60 | 478.27 |
| 5 | Q 1 | 111,707 | 137.90 | 90.75 | 2.82 | 1,280.96 | 18.90 | 51.92 | 78.07 | 116.77 | 173.17 | 248.14 | 461.92 |
| 5 | Q 2 | 113,706 | 164.22 | 96.56 | 10.36 | 1,388.32 | 44.18 | 74.57 | 100.00 | 140.31 | 200.85 | 280.62 | 513.79 |
| 5 | Q 3 | 112,995 | 177.39 | 100.84 | 17.39 | 1,398.84 | 53.38 | 84.23 | 110.21 | 152.28 | 215.15 | 299.45 | 539.39 |
| 5 | Q 4 | 113,506 | 184.87 | 99.63 | 28.79 | 1,504.73 | 61.06 | 92.15 | 118.39 | 159.61 | 222.84 | 306.83 | 546.05 |
| 6 | Q 1 | 112,206 | 146.93 | 90.21 | 2.76 | 1,510.69 | 20.34 | 58.35 | 87.15 | 127.66 | 184.07 | 256.66 | 465.13 |
| 6 | Q 2 | 112,535 | 174.38 | 92.88 | 13.04 | 1,460.15 | 53.40 | 85.57 | 111.72 | 152.53 | 210.96 | 289.72 | 505.87 |
| 6 | Q 3 | 113,597 | 181.20 | 95.03 | 26.98 | 1,567.56 | 60.76 | 91.81 | 117.56 | 158.25 | 218.20 | 297.22 | 524.71 |
| 6 | Q 4 | 113,919 | 186.17 | 95.78 | 14.02 | 1,859.77 | 66.46 | 97.68 | 123.26 | 162.79 | 221.59 | 300.17 | 535.49 |
| 7 | Q 1 | 116,536 | 112.13 | 68.07 | 2.24 | 1,019.45 | 14.40 | 43.60 | 66.96 | 98.74 | 140.92 | 194.00 | 347.59 |
| 7 | Q 2 | 116,022 | 132.59 | 70.54 | 6.85 | 1,759.28 | 38.46 | 65.60 | 86.38 | 117.06 | 160.28 | 216.29 | 381.88 |
| 7 | Q 3 | 117,881 | 142.23 | 71.98 | 15.50 | 1,344.51 | 48.44 | 74.15 | 94.79 | 126.00 | 169.84 | 227.80 | 398.99 |
| 7 | Q 4 | 117,271 | 159.60 | 77.22 | 24.57 | 1,377.32 | 58.96 | 86.96 | 109.39 | 142.71 | 188.84 | 249.52 | 436.47 |
| 8 | Q 1 | 114,626 | 118.00 | 74.09 | 2.17 | 1,171.71 | 11.64 | 41.82 | 67.88 | 103.37 | 150.73 | 208.95 | 372.66 |
| 8 | Q 2 | 113,540 | 145.18 | 75.53 | 10.99 | 1,377.49 | 40.41 | 70.93 | 94.61 | 129.08 | 176.50 | 237.46 | 403.38 |
| 8 | Q 3 | 115,873 | 164.56 | 81.48 | 11.39 | 1,755.44 | 55.93 | 86.95 | 110.82 | 146.29 | 196.81 | 261.98 | 448.93 |
| 8 | Q 4 | 114,780 | 183.22 | 87.76 | 31.53 | 2,264.95 | 69.90 | 102.03 | 126.43 | 163.21 | 215.80 | 285.46 | 500.52 |
| 11 | Q 1 | 108,045 | 76.51 | 53.23 | 1.67 | 881.10 | 5.78 | 21.39 | 39.98 | 66.97 | 100.03 | 139.70 | 260.54 |
| 11 | Q 2 | 108,183 | 103.31 | 55.82 | 4.22 | 1,096.87 | 22.42 | 47.39 | 66.81 | 92.92 | 126.57 | 169.12 | 297.87 |
| 11 | Q 3 | 108,995 | 124.57 | 58.98 | 9.12 | 858.23 | 39.54 | 66.63 | 86.17 | 112.92 | 148.36 | 193.72 | 335.05 |
| 11 | Q 4 | 109,477 | 147.04 | 60.86 | 18.65 | 1,018.29 | 58.84 | 87.75 | 108.01 | 135.30 | 170.77 | 217.33 | 367.10 |

Table 8.H. Computer Adaptive Test (CAT) Testing Time (In Minutes) at Each Ability Level‍—‍ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade** | **Ability Level** | **N** | **Mean** | **SD** | **Minimum** | **Maximum** | **Percentile Point 1** | **Percentile Point 10** | **Percentile Point 25** | **Percentile Point 50** | **Percentile Point 75** | **Percentile Point 90** | **Percentile Point 99** |
| 3 | Q 1 | 109,193 | 86.64 | 55.39 | 2.50 | 1,153.80 | 13.83 | 33.06 | 50.62 | 75.22 | 108.51 | 150.47 | 284.43 |
| 3 | Q 2 | 110,259 | 113.12 | 60.37 | 7.47 | 1,270.14 | 33.86 | 56.95 | 74.55 | 99.92 | 135.04 | 182.11 | 329.73 |
| 3 | Q 3 | 110,530 | 117.45 | 61.44 | 17.29 | 1,242.24 | 41.60 | 62.35 | 79.02 | 103.44 | 137.79 | 185.81 | 344.17 |
| 3 | Q 4 | 110,050 | 110.68 | 61.29 | 18.98 | 1,427.18 | 40.78 | 58.83 | 73.41 | 95.90 | 128.88 | 175.80 | 342.66 |
| 4 | Q 1 | 107,848 | 93.93 | 58.09 | 2.98 | 989.24 | 14.04 | 36.96 | 56.38 | 82.19 | 117.35 | 161.47 | 296.36 |
| 4 | Q 2 | 107,691 | 118.58 | 63.12 | 8.19 | 2,118.60 | 37.03 | 60.48 | 78.42 | 104.63 | 141.69 | 189.94 | 343.81 |
| 4 | Q 3 | 108,355 | 120.86 | 63.52 | 20.61 | 1,587.02 | 42.83 | 63.99 | 80.67 | 106.13 | 142.71 | 191.22 | 356.96 |
| 4 | Q 4 | 108,969 | 113.42 | 62.75 | 19.31 | 2,182.57 | 41.58 | 60.31 | 75.44 | 98.70 | 132.71 | 179.18 | 344.33 |
| 5 | Q 1 | 112,841 | 95.70 | 57.40 | 1.88 | 1,637.17 | 13.78 | 38.83 | 59.01 | 84.69 | 119.19 | 161.75 | 299.50 |
| 5 | Q 2 | 112,002 | 118.80 | 61.17 | 14.11 | 1,318.90 | 38.05 | 61.70 | 79.51 | 105.44 | 141.97 | 188.50 | 338.97 |
| 5 | Q 3 | 114,337 | 117.68 | 60.56 | 9.21 | 1,195.84 | 42.38 | 63.00 | 79.35 | 103.79 | 138.51 | 185.15 | 343.07 |
| 5 | Q 4 | 113,061 | 109.59 | 57.28 | 20.86 | 1,060.38 | 41.18 | 59.16 | 73.72 | 95.98 | 128.45 | 172.26 | 325.58 |
| 6 | Q 1 | 112,025 | 109.56 | 66.13 | 1.88 | 1,349.62 | 14.97 | 42.92 | 66.07 | 96.97 | 137.70 | 187.91 | 338.40 |
| 6 | Q 2 | 113,728 | 137.58 | 69.93 | 13.14 | 1,482.32 | 41.38 | 70.20 | 91.58 | 122.83 | 165.68 | 220.37 | 386.50 |
| 6 | Q 3 | 112,987 | 139.13 | 68.29 | 18.30 | 1,783.79 | 50.39 | 75.42 | 95.06 | 124.39 | 164.77 | 217.60 | 382.85 |
| 6 | Q 4 | 113,370 | 131.96 | 63.65 | 25.34 | 1,781.46 | 52.17 | 74.24 | 91.74 | 117.70 | 154.35 | 203.59 | 362.46 |
| 7 | Q 1 | 116,076 | 92.52 | 55.00 | 1.95 | 972.98 | 11.41 | 35.75 | 55.80 | 82.58 | 116.86 | 158.78 | 280.06 |
| 7 | Q 2 | 116,057 | 116.27 | 57.32 | 3.80 | 1,173.70 | 35.41 | 60.10 | 78.48 | 104.73 | 139.94 | 184.16 | 317.36 |
| 7 | Q 3 | 116,973 | 119.98 | 55.55 | 15.78 | 998.78 | 45.11 | 67.45 | 84.12 | 108.41 | 141.26 | 183.38 | 319.96 |
| 7 | Q 4 | 118,271 | 118.77 | 52.59 | 23.54 | 1,082.09 | 50.17 | 70.26 | 85.43 | 107.50 | 137.77 | 177.24 | 311.32 |
| 8 | Q 1 | 113,802 | 92.06 | 56.40 | 1.70 | 1,092.68 | 8.67 | 33.64 | 54.42 | 81.66 | 117.69 | 160.62 | 281.18 |
| 8 | Q 2 | 115,549 | 116.89 | 58.15 | 3.05 | 1,073.82 | 33.37 | 59.03 | 77.82 | 105.42 | 141.91 | 186.72 | 318.89 |
| 8 | Q 3 | 114,010 | 121.66 | 55.30 | 18.18 | 879.43 | 45.60 | 67.88 | 84.93 | 110.08 | 144.24 | 187.39 | 316.25 |
| 8 | Q 4 | 116,049 | 118.50 | 51.74 | 26.99 | 847.44 | 49.79 | 69.90 | 85.01 | 107.34 | 138.08 | 177.72 | 310.25 |
| 11 | Q 1 | 108,541 | 66.38 | 42.57 | 0.47 | 657.66 | 4.79 | 19.56 | 37.06 | 60.12 | 86.72 | 117.90 | 204.56 |
| 11 | Q 2 | 110,223 | 92.50 | 42.81 | 2.39 | 1,008.88 | 26.54 | 48.65 | 64.60 | 85.15 | 111.22 | 143.69 | 234.13 |
| 11 | Q 3 | 109,080 | 100.92 | 41.13 | 10.62 | 924.91 | 39.23 | 59.88 | 74.34 | 93.28 | 118.26 | 149.78 | 238.79 |
| 11 | Q 4 | 109,756 | 101.22 | 36.86 | 14.52 | 921.82 | 46.27 | 65.36 | 77.93 | 94.24 | 115.75 | 144.19 | 228.75 |

Table 8.H. CAT Testing Time (In Minutes) at Each Ability Level—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade** | **Ability Level** | **N** | **Mean** | **SD** | **Minimum** | **Maximum** | **Percentile Point 1** | **Percentile Point 10** | **Percentile Point 25** | **Percentile Point 50** | **Percentile Point 75** | **Percentile Point 90** | **Percentile Point 99** |
| 3 | Q 1 | 109,743 | 72.75 | 48.11 | 1.94 | 920.70 | 11.54 | 27.97 | 41.18 | 60.84 | 91.03 | 131.18 | 247.94 |
| 3 | Q 2 | 109,464 | 89.51 | 53.78 | 4.64 | 1,094.49 | 25.90 | 41.13 | 54.12 | 75.27 | 109.14 | 154.21 | 285.14 |
| 3 | Q 3 | 111,059 | 99.10 | 57.72 | 13.14 | 1,363.46 | 30.70 | 47.07 | 61.02 | 84.29 | 120.31 | 167.62 | 307.60 |
| 3 | Q 4 | 110,196 | 101.08 | 59.91 | 14.48 | 1,086.73 | 31.85 | 47.52 | 61.52 | 85.19 | 122.45 | 172.79 | 319.25 |
| 4 | Q 1 | 107,042 | 79.35 | 51.43 | 2.07 | 1,071.09 | 13.10 | 31.56 | 45.55 | 66.88 | 98.83 | 141.52 | 264.03 |
| 4 | Q 2 | 108,218 | 94.48 | 55.53 | 7.63 | 1,229.40 | 27.63 | 43.70 | 57.65 | 80.30 | 115.42 | 161.58 | 294.40 |
| 4 | Q 3 | 109,222 | 104.20 | 60.37 | 8.91 | 1,370.42 | 31.99 | 49.31 | 64.38 | 88.84 | 126.63 | 176.32 | 320.53 |
| 4 | Q 4 | 108,278 | 110.56 | 64.92 | 11.89 | 1,657.86 | 34.76 | 52.63 | 68.19 | 94.27 | 134.10 | 185.92 | 345.31 |
| 5 | Q 1 | 111,707 | 82.69 | 54.30 | 1.92 | 864.67 | 11.30 | 31.29 | 47.09 | 70.19 | 103.80 | 147.39 | 277.21 |
| 5 | Q 2 | 113,706 | 98.98 | 57.40 | 7.08 | 1,196.10 | 27.31 | 45.91 | 60.99 | 84.80 | 120.64 | 167.48 | 308.58 |
| 5 | Q 3 | 112,995 | 108.26 | 60.10 | 10.69 | 996.72 | 34.02 | 52.69 | 68.46 | 93.59 | 130.76 | 179.87 | 326.51 |
| 5 | Q 4 | 113,506 | 114.53 | 60.25 | 17.96 | 961.52 | 39.46 | 58.55 | 74.48 | 99.83 | 137.36 | 186.65 | 332.71 |
| 6 | Q 1 | 112,206 | 97.22 | 60.47 | 2.13 | 793.25 | 12.33 | 37.39 | 57.09 | 84.47 | 122.35 | 170.73 | 308.85 |
| 6 | Q 2 | 112,535 | 114.92 | 61.47 | 8.23 | 1,367.32 | 35.06 | 56.34 | 73.72 | 100.70 | 139.05 | 189.27 | 335.12 |
| 6 | Q 3 | 113,597 | 117.15 | 60.75 | 13.85 | 1,459.33 | 39.61 | 60.08 | 76.79 | 102.85 | 140.53 | 189.73 | 336.50 |
| 6 | Q 4 | 113,919 | 119.22 | 59.77 | 9.03 | 1,366.72 | 42.82 | 63.38 | 79.93 | 105.28 | 141.89 | 190.15 | 333.42 |
| 7 | Q 1 | 116,536 | 81.00 | 50.05 | 1.95 | 817.38 | 8.31 | 29.64 | 47.59 | 71.37 | 103.11 | 141.69 | 253.31 |
| 7 | Q 2 | 116,022 | 95.82 | 50.52 | 4.84 | 1,373.86 | 26.80 | 47.30 | 62.58 | 84.94 | 116.28 | 155.29 | 273.00 |
| 7 | Q 3 | 117,881 | 102.53 | 50.50 | 10.29 | 1,054.38 | 34.76 | 54.09 | 69.17 | 91.48 | 122.90 | 162.41 | 279.64 |
| 7 | Q 4 | 117,271 | 118.86 | 56.81 | 19.98 | 1,136.79 | 43.98 | 65.00 | 81.86 | 106.79 | 141.04 | 184.78 | 318.17 |
| 8 | Q 1 | 114,626 | 84.28 | 54.25 | 1.75 | 780.97 | 6.88 | 27.95 | 47.25 | 73.88 | 108.98 | 151.07 | 268.16 |
| 8 | Q 2 | 113,540 | 103.97 | 53.87 | 4.99 | 970.21 | 27.87 | 50.56 | 67.99 | 92.96 | 127.04 | 168.99 | 287.58 |
| 8 | Q 3 | 115,873 | 117.93 | 57.13 | 8.09 | 997.22 | 39.71 | 62.89 | 80.19 | 105.80 | 141.33 | 185.40 | 313.81 |
| 8 | Q 4 | 114,780 | 133.26 | 62.77 | 17.81 | 1,273.52 | 51.14 | 74.64 | 92.59 | 119.66 | 156.87 | 205.62 | 358.02 |
| 11 | Q 1 | 108,045 | 52.90 | 35.78 | 0.86 | 681.80 | 4.15 | 14.20 | 27.98 | 47.10 | 69.71 | 95.48 | 174.21 |
| 11 | Q 2 | 108,183 | 70.80 | 35.97 | 1.68 | 847.56 | 15.73 | 33.76 | 47.24 | 64.68 | 86.37 | 113.53 | 193.12 |
| 11 | Q 3 | 108,995 | 84.43 | 37.67 | 7.44 | 684.91 | 28.07 | 46.97 | 59.98 | 77.38 | 99.90 | 129.27 | 215.24 |
| 11 | Q 4 | 109,477 | 101.90 | 40.44 | 14.65 | 636.50 | 41.72 | 62.08 | 76.14 | 94.33 | 117.61 | 149.55 | 244.09 |

Table 8.H. Performance Task (PT) Testing Time (In Minutes) at Each Ability Level—ELA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grade | Number of PTs | Ability Level | N | Mean | SD | Minimum | Maximum | Percentile Point 1 | Percentile Point 10 | Percentile Point 25 | Percentile Point 50 | Percentile Point 75 | Percentile Point 90 | Percentile Point 99 |
| 3 | 19 | Q 1 | 109,193 | 97.56 | 82.04 | 0.15 | 1,158.77 | 3.93 | 20.67 | 40.38 | 76.48 | 130.96 | 198.05 | 393.39 |
| 3 | 19 | Q 2 | 110,259 | 116.42 | 83.10 | 0.54 | 1,016.17 | 12.59 | 35.88 | 58.57 | 97.37 | 151.09 | 218.45 | 411.13 |
| 3 | 19 | Q 3 | 110,530 | 120.26 | 81.33 | 0.38 | 1,101.35 | 17.72 | 41.81 | 64.42 | 101.84 | 153.21 | 219.43 | 411.97 |
| 3 | 19 | Q 4 | 110,050 | 122.21 | 77.41 | 1.73 | 1,070.86 | 22.56 | 46.61 | 69.19 | 104.85 | 154.36 | 217.26 | 395.03 |
| 4 | 22 | Q 1 | 107,848 | 104.76 | 86.81 | 0.29 | 1,476.81 | 4.29 | 22.72 | 43.71 | 82.07 | 141.23 | 213.57 | 411.30 |
| 4 | 22 | Q 2 | 107,691 | 125.68 | 87.20 | 0.06 | 1,595.60 | 15.28 | 40.38 | 64.78 | 105.69 | 162.88 | 234.04 | 430.42 |
| 4 | 22 | Q 3 | 108,355 | 130.26 | 85.57 | 0.19 | 1,261.95 | 20.94 | 47.08 | 71.37 | 110.68 | 165.20 | 235.92 | 436.57 |
| 4 | 22 | Q 4 | 108,969 | 132.49 | 81.43 | 0.58 | 1,267.01 | 26.49 | 53.08 | 76.78 | 114.45 | 165.90 | 231.77 | 419.71 |
| 5 | 25 | Q 1 | 112,841 | 101.07 | 84.22 | 0.25 | 1,046.92 | 3.79 | 22.09 | 42.46 | 78.51 | 135.52 | 207.39 | 399.11 |
| 5 | 25 | Q 2 | 112,002 | 124.78 | 86.88 | 0.31 | 1,231.69 | 15.86 | 41.40 | 64.51 | 104.31 | 160.63 | 232.84 | 432.35 |
| 5 | 25 | Q 3 | 114,337 | 128.49 | 84.26 | 0.70 | 1,081.71 | 21.59 | 47.45 | 70.43 | 108.66 | 163.25 | 232.38 | 427.07 |
| 5 | 25 | Q 4 | 113,061 | 131.54 | 80.30 | 0.96 | 1,214.05 | 27.97 | 54.34 | 76.72 | 113.10 | 163.98 | 230.51 | 417.77 |
| 6 | 19 | Q 1 | 112,025 | 98.16 | 85.71 | 0.24 | 1,220.62 | 3.70 | 21.66 | 41.01 | 73.53 | 129.61 | 204.55 | 406.89 |
| 6 | 19 | Q 2 | 113,728 | 124.81 | 90.96 | 0.17 | 1,619.06 | 15.55 | 41.15 | 63.41 | 101.14 | 159.96 | 235.55 | 453.70 |
| 6 | 19 | Q 3 | 112,987 | 131.81 | 88.69 | 0.09 | 1,274.92 | 23.38 | 49.75 | 72.01 | 109.48 | 165.78 | 240.07 | 451.84 |
| 6 | 19 | Q 4 | 113,370 | 137.32 | 84.02 | 0.36 | 1,269.64 | 31.07 | 58.32 | 80.44 | 117.16 | 169.85 | 240.13 | 439.02 |
| 7 | 24 | Q 1 | 116,076 | 87.24 | 74.02 | 0.09 | 1,441.91 | 2.78 | 19.21 | 37.65 | 67.52 | 114.84 | 178.03 | 354.53 |
| 7 | 24 | Q 2 | 116,057 | 114.26 | 79.20 | 0.21 | 1,555.42 | 14.51 | 39.78 | 60.96 | 94.18 | 145.43 | 212.72 | 397.24 |
| 7 | 24 | Q 3 | 116,973 | 125.41 | 79.26 | 0.13 | 1,543.07 | 24.32 | 50.94 | 72.30 | 106.28 | 155.99 | 222.39 | 406.54 |
| 7 | 24 | Q 4 | 118,271 | 136.19 | 78.82 | 0.73 | 1,525.49 | 33.59 | 61.91 | 83.84 | 118.34 | 166.70 | 230.63 | 419.41 |
| 8 | 25 | Q 1 | 113,802 | 82.22 | 70.23 | 0.14 | 1,337.07 | 1.97 | 16.93 | 35.14 | 63.83 | 107.80 | 169.56 | 335.26 |
| 8 | 25 | Q 2 | 115,549 | 111.17 | 76.85 | 0.06 | 1,610.80 | 14.07 | 39.45 | 60.05 | 91.84 | 141.35 | 205.88 | 383.20 |
| 8 | 25 | Q 3 | 114,010 | 121.48 | 76.29 | 0.27 | 1,666.29 | 23.52 | 50.20 | 70.69 | 102.68 | 150.84 | 214.78 | 396.44 |
| 8 | 25 | Q 4 | 116,049 | 134.24 | 78.62 | 0.49 | 1,326.23 | 33.62 | 61.50 | 82.69 | 115.82 | 163.46 | 226.93 | 416.38 |
| 11 | 28 | Q 1 | 108,541 | 52.85 | 48.01 | 0.09 | 776.34 | 0.63 | 6.44 | 18.40 | 41.57 | 73.30 | 110.01 | 223.72 |
| 11 | 28 | Q 2 | 110,223 | 83.19 | 55.70 | 0.15 | 1,445.40 | 5.79 | 27.27 | 46.94 | 72.82 | 104.60 | 149.00 | 277.97 |
| 11 | 28 | Q 3 | 109,080 | 98.42 | 58.16 | 0.24 | 1,433.46 | 15.48 | 42.42 | 61.84 | 86.75 | 119.66 | 166.97 | 303.47 |
| 11 | 28 | Q 4 | 109,756 | 105.98 | 56.20 | 0.24 | 1,289.37 | 27.54 | 53.59 | 71.44 | 94.19 | 124.93 | 171.36 | 312.41 |

Table 8.H. PT Testing Time (In Minutes) at Each Ability Level—Mathematics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grade | Number of PTs | Ability Level | N | Mean | SD | Minimum | Maximum | Percentile Point 1 | Percentile Point 10 | Percentile Point 25 | Percentile Point 50 | Percentile Point 75 | Percentile Point 90 | Percentile Point 99 |
| 3 | 17 | Q 1 | 109,743 | 43.55 | 37.51 | 0.05 | 912.72 | 3.18 | 11.78 | 20.10 | 33.69 | 55.21 | 85.22 | 185.62 |
| 3 | 17 | Q 2 | 109,464 | 49.02 | 38.30 | 0.06 | 898.30 | 6.78 | 16.55 | 24.90 | 38.94 | 60.90 | 92.05 | 192.02 |
| 3 | 17 | Q 3 | 111,059 | 48.87 | 36.41 | 0.04 | 721.47 | 8.09 | 17.60 | 25.81 | 39.31 | 60.36 | 90.23 | 186.47 |
| 3 | 17 | Q 4 | 110,196 | 46.39 | 33.98 | 0.05 | 593.81 | 8.31 | 17.05 | 24.83 | 37.48 | 57.16 | 85.29 | 173.99 |
| 4 | 23 | Q 1 | 107,042 | 43.94 | 36.78 | 0.07 | 922.84 | 3.17 | 12.27 | 20.88 | 34.37 | 55.51 | 85.75 | 179.36 |
| 4 | 23 | Q 2 | 108,218 | 48.50 | 36.77 | 0.07 | 1,158.53 | 7.57 | 17.32 | 25.50 | 38.75 | 59.75 | 90.15 | 184.10 |
| 4 | 23 | Q 3 | 109,222 | 47.24 | 35.18 | 0.06 | 1,297.51 | 8.41 | 17.44 | 25.15 | 38.01 | 58.36 | 87.03 | 175.61 |
| 4 | 23 | Q 4 | 108,278 | 43.96 | 32.56 | 0.04 | 1,183.96 | 8.32 | 16.29 | 23.43 | 35.32 | 54.20 | 80.82 | 166.29 |
| 5 | 19 | Q 1 | 111,707 | 55.21 | 47.19 | 0.05 | 726.16 | 3.12 | 14.56 | 25.62 | 42.79 | 69.95 | 109.06 | 231.95 |
| 5 | 19 | Q 2 | 113,706 | 65.25 | 50.54 | 0.07 | 909.86 | 8.39 | 21.77 | 33.16 | 51.92 | 81.38 | 123.45 | 254.06 |
| 5 | 19 | Q 3 | 112,995 | 69.13 | 52.70 | 0.06 | 1,001.83 | 10.05 | 23.95 | 35.60 | 55.21 | 85.65 | 130.06 | 266.58 |
| 5 | 19 | Q 4 | 113,506 | 70.34 | 51.60 | 0.06 | 796.71 | 11.37 | 24.67 | 37.00 | 56.84 | 87.47 | 131.93 | 261.61 |
| 6 | 16 | Q 1 | 112,206 | 49.70 | 40.66 | 0.05 | 859.58 | 2.66 | 13.59 | 24.06 | 39.57 | 62.82 | 96.09 | 201.37 |
| 6 | 16 | Q 2 | 112,535 | 59.46 | 42.96 | 0.05 | 955.97 | 8.67 | 21.79 | 32.10 | 48.32 | 73.54 | 109.54 | 219.54 |
| 6 | 16 | Q 3 | 113,597 | 64.05 | 46.12 | 0.04 | 985.10 | 11.18 | 24.55 | 34.96 | 51.91 | 78.46 | 117.19 | 238.02 |
| 6 | 16 | Q 4 | 113,919 | 66.95 | 48.95 | 0.04 | 1,135.18 | 14.04 | 27.06 | 37.31 | 53.98 | 80.34 | 120.64 | 254.00 |
| 7 | 18 | Q 1 | 116,536 | 31.13 | 27.51 | 0.04 | 653.65 | 1.52 | 7.63 | 14.11 | 24.16 | 39.25 | 61.17 | 135.08 |
| 7 | 18 | Q 2 | 116,022 | 36.78 | 29.40 | 0.05 | 765.71 | 4.53 | 11.93 | 18.57 | 29.15 | 45.75 | 69.41 | 146.39 |
| 7 | 18 | Q 3 | 117,881 | 39.70 | 31.01 | 0.05 | 827.82 | 5.92 | 13.48 | 20.44 | 31.60 | 49.08 | 74.15 | 157.32 |
| 7 | 18 | Q 4 | 117,271 | 40.74 | 30.94 | 0.06 | 691.19 | 5.83 | 13.62 | 21.18 | 33.13 | 50.87 | 75.09 | 156.68 |
| 8 | 16 | Q 1 | 114,626 | 33.72 | 29.54 | 0.05 | 871.83 | 1.15 | 7.33 | 14.82 | 26.36 | 43.23 | 67.42 | 144.94 |
| 8 | 16 | Q 2 | 113,540 | 41.21 | 31.51 | 0.05 | 774.80 | 4.39 | 13.38 | 21.22 | 33.18 | 51.55 | 77.64 | 156.69 |
| 8 | 16 | Q 3 | 115,873 | 46.63 | 34.35 | 0.05 | 901.94 | 7.44 | 16.98 | 25.00 | 37.78 | 57.66 | 85.89 | 171.16 |
| 8 | 16 | Q 4 | 114,780 | 49.96 | 35.13 | 0.06 | 1,257.98 | 10.54 | 19.77 | 27.73 | 40.80 | 61.25 | 89.92 | 179.93 |
| 11 | 14 | Q 1 | 108,045 | 23.61 | 23.74 | 0.06 | 509.70 | 0.68 | 2.91 | 7.73 | 17.51 | 31.76 | 49.99 | 112.34 |
| 11 | 14 | Q 2 | 108,183 | 32.51 | 26.62 | 0.06 | 530.28 | 1.53 | 7.88 | 15.21 | 26.50 | 41.91 | 62.64 | 130.35 |
| 11 | 14 | Q 3 | 108,995 | 40.14 | 28.34 | 0.05 | 458.54 | 3.45 | 13.50 | 22.01 | 33.95 | 50.59 | 72.44 | 145.32 |
| 11 | 14 | Q 4 | 109,477 | 45.14 | 27.55 | 0.06 | 696.17 | 7.47 | 19.66 | 27.83 | 39.32 | 55.22 | 76.01 | 147.67 |

### Appendix 8.I: Correlations Between Content Areas

**Notes for the tables in appendix 8.I:**

Numbers that are in **bold** font and indicated with an asterisk (\*) are the sample sizes to calculate the correlations.

Sample sizes of the individual assessments are not in bold font.

R denotes the correlation coefficient; these are decimals that begin with “0” (zero).

Table 8.I. Correlations for Gender

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Grade and Content Area** | **Male Sample Size** | **Male R and Sample Size** | **Female Sample Size** | **Female R and Sample Size** |
| ELA 3 | 225,419 | 0.82 | 217,223 | 0.82 |
| Mathematics 3 | 226,558 | **\*224,970** | 218,292 | **\*216,830** |
| ELA 4 | 223,051 | 0.82 | 212,255 | 0.82 |
| Mathematics 4 | 224,177 | **\*222,599** | 213,220 | **\*211,860** |
| ELA 5 | 233,418 | 0.82 | 221,132 | 0.81 |
| Mathematics 5 | 234,430 | **\*232,920** | 221,900 | **\*220,711** |
| ELA 6 | 234,281 | 0.84 | 223,125 | 0.82 |
| Mathematics 6 | 235,145 | **\*233,567** | 223,846 | **\*222,535** |
| ELA 7 | 240,794 | 0.83 | 230,698 | 0.81 |
| Mathematics 7 | 241,620 | **\*239,850** | 231,354 | **\*229,863** |
| ELA 8 | 235,234 | 0.82 | 226,231 | 0.81 |
| Mathematics 8 | 235,689 | **\*234,025** | 226,535 | **\*225,151** |
| ELA 11 | 223,205 | 0.79 | 216,735 | 0.78 |
| Mathematics 11 | 222,405 | **\*220,343** | 215,694 | **\*213,968** |

Table 8.I. Correlations for Primary Ethnicity

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade and Content Area** | **American Indian or Alaska Native Sample Size** | **American Indian or Alaska Native R and Sample Size** | **Asian Sample Size** | **Asian R and Sample Size** | **Native Hawaiian or Other Pacific Islander Sample Size** | **Native Hawaiian or Other Pacific Islander R and Sample Size** | **Filipino Sample Size** | **Filipino R and Sample Size** |
| ELA 3 | 2,100 | 0.79 | 40,744 | 0.80 | 1,882 | 0.80 | 8,565 | 0.79 |
| Mathematics 3 | 2,102 | **\*2,090** | 41,315 | **\*40,707** | 1,877 | **\*1,872** | 8,612 | **\*8,555** |
| ELA 4 | 2,022 | 0.78 | 39,756 | 0.80 | 1,914 | 0.79 | 8,512 | 0.79 |
| Mathematics 4 | 2,023 | **\*2,016** | 40,313 | **\*39,725** | 1,917 | **\*1,906** | 8,572 | **\*8,501** |
| ELA 5 | 2,181 | 0.78 | 42,187 | 0.80 | 2,079 | 0.80 | 9,158 | 0.79 |
| Mathematics 5 | 2,189 | **\*2,178** | 42,713 | **\*42,156** | 2,080 | **\*2,076** | 9,215 | **\*9,151** |
| ELA 6 | 2,339 | 0.81 | 42,008 | 0.81 | 2,150 | 0.80 | 9,274 | 0.81 |
| Mathematics 6 | 2,341 | **\*2,328** | 42,442 | **\*41,957** | 2,142 | **\*2,138** | 9,320 | **\*9,253** |
| ELA 7 | 2,385 | 0.78 | 43,283 | 0.8 | 2,120 | 0.79 | 10,514 | 0.79 |
| Mathematics 7 | 2,383 | **\*2,371** | 43,646 | **\*43,234** | 2,125 | **\*2,107** | 10,561 | **\*10,490** |
| ELA 8 | 2,392 | 0.78 | 43,485 | 0.8 | 2,188 | 0.79 | 10,906 | 0.79 |
| Mathematics 8 | 2,378 | **\*2,367** | 43,792 | **\*43,428** | 2,188 | **\*2,174** | 10,947 | **\*10,879** |
| ELA 11 | 2,244 | 0.74 | 42,683 | 0.76 | 2,135 | 0.76 | 12,489 | 0.76 |
| Mathematics 11 | 2,209 | **\*2,188** | 42,647 | **\*42,341** | 2,100 | **\*2,085** | 12,436 | **\*12,379** |

Table 8.I.2 Correlations for Primary Ethnicity (Continued)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade and Content Area** | **Hispanic or Latino Sample Size** | **Hispanic or Latino R and Sample Size** | **Black or Black or African American Sample Size** | **Black or Black or African American R and Sample Size** | **White Sample Size** | **White R and Sample Size** | **Two or More Races Sample Size** | **Two or More Races R and Sample Size** |
| ELA 3 | 243,572 | 0.78 | 23,390 | 0.78 | 99,100 | 0.79 | 23,289 | 0.82 |
| Mathematics 3 | 244,988 | **\*243,192** | 23,351 | **\*23,285** | 99,244 | **\*98,874** | 23,361 | **\*23,225** |
| ELA 4 | 240,403 | 0.78 | 23,063 | 0.79 | 97,290 | 0.79 | 22,346 | 0.82 |
| Mathematics 4 | 241,677 | **\*239,959** | 23,019 | **\*22,960** | 97,454 | **\*97,103** | 22,422 | **\*22,289** |
| ELA 5 | 252,374 | 0.77 | 24,337 | 0.78 | 100,679 | 0.79 | 21,555 | 0.82 |
| Mathematics 5 | 253,478 | **\*251,885** | 24,280 | **\*24,228** | 100,775 | **\*100,463** | 21,600 | **\*21,494** |
| ELA 6 | 253,705 | 0.79 | 24,238 | 0.80 | 102,740 | 0.81 | 20,952 | 0.83 |
| Mathematics 6 | 254,822 | **\*253,055** | 24,195 | **\*24,085** | 102,731 | **\*102,398** | 20,998 | **\*20,888** |
| ELA 7 | 261,734 | 0.78 | 24,777 | 0.78 | 105,850 | 0.80 | 20,829 | 0.82 |
| Mathematics 7 | 262,850 | **\*260,716** | 24,682 | **\*24,567** | 105,847 | **\*105,475** | 20,880 | **\*20,753** |
| ELA 8 | 253,499 | 0.78 | 24,357 | 0.79 | 105,321 | 0.79 | 19,317 | 0.82 |
| Mathematics 8 | 254,205 | **\*252,237** | 24,241 | **\*24,118** | 105,157 | **\*104,766** | 19,316 | **\*19,207** |
| ELA 11 | 237,048 | 0.75 | 23,305 | 0.75 | 102,465 | 0.77 | 17,571 | 0.78 |
| Mathematics 11 | 236,233 | **\*234,018** | 23,099 | **\*22,811** | 101,923 | **\*101,199** | 17,452 | **\*17,290** |

Table 8.I. Correlations for English Fluency

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade and Content Area** | **English Only Sample Size** | **English Only R and Sample Size** | **Initially Fluent English Proficient Sample Size** | **Initially Fluent English Proficient R and Sample Size** | **English Learner Sample Size** | **English Learner R and Sample Size** | **Reclassified Fluent English Proficient Sample Size** | **Reclassified Fluent English Proficient R and Sample Size** |
| ELA 3 | 267,755 | 0.81 | 16,252 | 0.79 | 95,577 | 0.71 | 62,660 | 0.73 |
| Mathematics 3 | 267,511 | **\*267,179** | 16,249 | **\*16,238** | 97,950 | **\*95,391** | 62,622 | **\*62,597** |
| ELA 4 | 257,039 | 0.81 | 17,023 | 0.78 | 97,195 | 0.70 | 63,707 | 0.72 |
| Mathematics 4 | 256,747 | **\*256,460** | 17,019 | **\*17,000** | 99,517 | **\*97,015** | 63,664 | **\*63,648** |
| ELA 5 | 263,782 | 0.81 | 17,976 | 0.79 | 85,721 | 0.65 | 86,768 | 0.73 |
| Mathematics 5 | 263,447 | **\*263,173** | 17,980 | **\*17,959** | 87,787 | **\*85,515** | 86,709 | **\*86,685** |
| ELA 6 | 260,980 | 0.83 | 18,054 | 0.80 | 72,412 | 0.66 | 105,630 | 0.76 |
| Mathematics 6 | 260,582 | **\*260,098** | 18,056 | **\*18,021** | 74,375 | **\*72,187** | 105,538 | **\*105,470** |
| ELA 7 | 262,967 | 0.82 | 20,044 | 0.80 | 66,234 | 0.62 | 121,896 | 0.75 |
| Mathematics 7 | 262,505 | **\*261,841** | 20,048 | **\*20,001** | 68,224 | **\*65,907** | 121,755 | **\*121,621** |
| ELA 8 | 253,000 | 0.82 | 20,014 | 0.80 | 55,230 | 0.61 | 132,956 | 0.76 |
| Mathematics 8 | 252,161 | **\*251,474** | 20,027 | **\*19,970** | 56,893 | **\*54,895** | 132,787 | **\*132,575** |
| ELA 11 | 232,889 | 0.78 | 23,040 | 0.76 | 38,715 | 0.56 | 145,009 | 0.74 |
| Mathematics 11 | 231,251 | **\*229,675** | 22,911 | **\*22,785** | 39,204 | **\*37,905** | 144,409 | **\*143,666** |

Table 8.I.3 Correlations for English Fluency (Continued)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Grade and Content Area** | **To Be Determined Sample Size** | **To Be Determined R and Sample Size** | **English Proficiency Unknown Sample Size** | **English Proficiency Unknown R and Sample Size** |
| ELA 3 | 145 | 0.84 | 253 | 0.79 |
| Mathematics 3 | 244 | **\*145** | 274 | **\*250** |
| ELA 4 | 113 | 0.84 | 229 | 0.85 |
| Mathematics 4 | 203 | **\*109** | 247 | **\*227** |
| ELA 5 | 103 | 0.84 | 200 | 0.75 |
| Mathematics 5 | 191 | **\*100** | 216 | **\*199** |
| ELA 6 | 117 | 0.83 | 213 | 0.76 |
| Mathematics 6 | 212 | **\*115** | 228 | **\*211** |
| ELA 7 | 159 | 0.78 | 192 | 0.79 |
| Mathematics 7 | 220 | **\*153** | 222 | **\*190** |
| ELA 8 | 115 | 0.77 | 150 | 0.77 |
| Mathematics 8 | 182 | **\*112** | 174 | **\*150** |
| ELA 11 | 125 | 0.78 | 162 | 0.72 |
| Mathematics 11 | 160 | **\*122** | 164 | **\*158** |

Table 8.I. Correlations for Economic Status

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Grade and Content Area** | **Not Economically Disadvantaged Sample Size** | **Not Economically Disadvantaged R and Sample Size** | **Economically Disadvantaged Sample Size** | **Economically Disadvantaged R and Sample Size** |
| ELA 3 | 167,661 | 0.79 | 274,981 | 0.78 |
| Mathematics 3 | 168,570 | **\*167,415** | 276,280 | **\*274,385** |
| ELA 4 | 165,017 | 0.79 | 270,289 | 0.78 |
| Mathematics 4 | 165,862 | **\*164,768** | 271,535 | **\*269,691** |
| ELA 5 | 172,205 | 0.79 | 282,345 | 0.77 |
| Mathematics 5 | 172,903 | **\*171,931** | 283,427 | **\*281,700** |
| ELA 6 | 174,834 | 0.81 | 282,572 | 0.79 |
| Mathematics 6 | 175,340 | **\*174,414** | 283,651 | **\*281,688** |
| ELA 7 | 183,885 | 0.80 | 287,607 | 0.77 |
| Mathematics 7 | 184,439 | **\*183,406** | 288,535 | **\*286,307** |
| ELA 8 | 182,867 | 0.80 | 278,598 | 0.78 |
| Mathematics 8 | 183,095 | **\*182,143** | 279,129 | **\*277,033** |
| ELA 11 | 187,460 | 0.78 | 252,480 | 0.75 |
| Mathematics 11 | 186,677 | **\*185,325** | 251,422 | **\*248,986** |

Table 8.I. Correlations for Special Education Services Status

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Grade and Content Area** | **No Special Education Services Sample Size** | **No Special Education Services R and Sample Size** | **With Special Education Services Sample Size** | **With Special Education Services R and Sample Size** |
| ELA 3 | 391,486 | 0.80 | 51,156 | 0.78 |
| Mathematics 3 | 393,797 | **\*390,889** | 51,053 | **\*50,911** |
| ELA 4 | 381,725 | 0.80 | 53,581 | 0.78 |
| Mathematics 4 | 383,896 | **\*381,085** | 53,501 | **\*53,374** |
| ELA 5 | 397,412 | 0.79 | 57,138 | 0.77 |
| Mathematics 5 | 399,317 | **\*396,757** | 57,013 | **\*56,874** |
| ELA 6 | 402,186 | 0.81 | 55,220 | 0.76 |
| Mathematics 6 | 403,926 | **\*401,253** | 55,065 | **\*54,849** |
| ELA 7 | 416,616 | 0.79 | 54,876 | 0.74 |
| Mathematics 7 | 418,292 | **\*415,280** | 54,682 | **\*54,433** |
| ELA 8 | 409,113 | 0.80 | 52,352 | 0.73 |
| Mathematics 8 | 410,159 | **\*407,384** | 52,065 | **\*51,792** |
| ELA 11 | 398,572 | 0.77 | 41,368 | 0.66 |
| Mathematics 11 | 397,209 | **\*393,952** | 40,890 | **\*40,359** |

Table 8.I. Correlations for Migrant Status

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Grade and Content Area** | **Change School or LEA Sample Size** | **Change School or LEA R and Sample Size** | **Remain in the Same School or LEA Sample Size** | **Remain in the Same School or LEA R and Sample Size** |
| ELA 3 | 3,756 | 0.75 | 438,886 | 0.81 |
| Mathematics 3 | 3,818 | **\*3,748** | 441,032 | **\*438,052** |
| ELA 4 | 3,744 | 0.77 | 431,562 | 0.81 |
| Mathematics 4 | 3,802 | **\*3,740** | 433,595 | **\*430,719** |
| ELA 5 | 3,789 | 0.74 | 450,761 | 0.81 |
| Mathematics 5 | 3,853 | **\*3,780** | 452,477 | **\*449,851** |
| ELA 6 | 3,597 | 0.79 | 453,809 | 0.83 |
| Mathematics 6 | 3,654 | **\*3,587** | 455,337 | **\*452,515** |
| ELA 7 | 3,630 | 0.75 | 467,862 | 0.81 |
| Mathematics 7 | 3,703 | **\*3,619** | 469,271 | **\*466,094** |
| ELA 8 | 3,745 | 0.76 | 457,720 | 0.82 |
| Mathematics 8 | 3,793 | **\*3,732** | 458,431 | **\*455,444** |
| ELA 11 | 3,081 | 0.75 | 436,859 | 0.78 |
| Mathematics 11 | 3,093 | **\*3,049** | 435,006 | **\*431,262** |

Table 8.I. Correlations for Military Status

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Grade and Content Area** | **Military Sample Size** | **Military R and Sample Size** | **Not Military Sample Size** | **Not Military R and Sample Size** |
| ELA 3 | 4,855 | 0.79 | 437,787 | 0.81 |
| Mathematics 3 | 4,849 | **\*4,840** | 440,001 | **\*436,960** |
| ELA 4 | 4,504 | 0.78 | 430,802 | 0.81 |
| Mathematics 4 | 4,506 | **\*4,494** | 432,891 | **\*429,965** |
| ELA 5 | 4,561 | 0.79 | 449,989 | 0.81 |
| Mathematics 5 | 4,560 | **\*4,551** | 451,770 | **\*449,080** |
| ELA 6 | 4,321 | 0.8 | 453,085 | 0.83 |
| Mathematics 6 | 4,316 | **\*4,305** | 454,675 | **\*451,797** |
| ELA 7 | 4,439 | 0.79 | 467,053 | 0.81 |
| Mathematics 7 | 4,437 | **\*4,423** | 468,537 | **\*465,290** |
| ELA 8 | 4,798 | 0.79 | 456,667 | 0.82 |
| Mathematics 8 | 4,789 | **\*4,777** | 457,435 | **\*454,399** |
| ELA 11 | 6,154 | 0.75 | 433,786 | 0.78 |
| Mathematics 11 | 6,123 | **\*6,090** | 431,976 | **\*428,221** |

Table 8.I. Correlations for Homeless Status

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Grade and Content Area** | **Homeless Sample Size** | **Homeless R and Sample Size** | **Not Homeless Sample Size** | **Not Homeless R and Sample Size** |
| ELA 3 | 17,716 | 0.77 | 424,926 | 0.81 |
| Mathematics 3 | 17,977 | **\*17,649** | 426,873 | **\*424,151** |
| ELA 4 | 17,460 | 0.77 | 417,846 | 0.81 |
| Mathematics 4 | 17,733 | **\*17,397** | 419,664 | **\*417,062** |
| ELA 5 | 18,020 | 0.76 | 436,530 | 0.81 |
| Mathematics 5 | 18,255 | **\*17,971** | 438,075 | **\*435,660** |
| ELA 6 | 16,677 | 0.79 | 440,729 | 0.83 |
| Mathematics 6 | 16,961 | **\*16,596** | 442,030 | **\*439,506** |
| ELA 7 | 14,956 | 0.77 | 456,536 | 0.81 |
| Mathematics 7 | 15,203 | **\*14,847** | 457,771 | **\*454,866** |
| ELA 8 | 15,118 | 0.77 | 446,347 | 0.82 |
| Mathematics 8 | 15,329 | **\*15,002** | 446,895 | **\*444,174** |
| ELA 11 | 13,350 | 0.73 | 426,590 | 0.78 |
| Mathematics 11 | 13,338 | **\*13,095** | 424,761 | **\*421,216** |