

## Tables

Table 1. The Colorado Model Content Standards and Subcontent Areas .....	100
Table 2. Configuration of 2010 CSAP Assessments .....	102
Table 3. Configuration of 2010 CSAP Reading Assessments by Grade, Content Standard, Subcontent Area, and Item Type .....	103
Table 4. Configuration of 2010 CSAP Writing Assessments by Grade, Content Standard, Subcontent Area, and Item Type .....	104
Table 5. Configuration of 2010 CSAP Mathematics Assessments by Grade, Content Standard, Subcontent Area, and Item Type .....	105
Table 6. Configuration of 2010 CSAP Science Assessments by Grade, Content Standard, Subcontent Area, and Item Type .....	106
Table 7. Percentage of Items in Depth of Knowledge Levels .....	107
Table 8. Percentage of Score Points in Depth of Knowledge Levels .....	108
Table 9. Previously Administered Items Selected for 2010 Test Forms that were Flagged for DIF or Fit .....	109
Table 10. Lowest and Highest Obtainable Scale Scores for the CSAP Assessments .....	113
Table 11. Rater Reliability Statistics – Mathematics .....	114
Table 12. Rater Reliability Statistics – Reading .....	117
Table 13. Rater Reliability Statistics – Writing .....	120
Table 14. Rater Reliability Statistics – Science .....	123
Table 15. Rater Reliability Statistics – Spanish Reading .....	125
Table 16. Rater Reliability Statistics – Spanish Writing .....	126
Table 17. Rater Severity/Leniency Study Results .....	127
Table 18. Tested Population Demographic Distribution – Mathematics .....	130
Table 19. Tested Population Demographic Distribution – Reading .....	131
Table 20. Tested Population Demographic Distribution – Writing .....	132
Table 21. Tested Population Demographic Distribution – Science .....	133
Table 22. Tested Population Demographic Distribution – Spanish Reading and Writing .....	134
Table 23. Multiple-Choice Item Analyses, English Grade 03 Reading .....	135
Table 24. Constructed-Response Item Analyses, English Grade 03 Reading .....	135
Table 25. Multiple-Choice Item Analyses, Spanish Grade 03 Reading .....	136
Table 26. Constructed-Response Item Analyses, Spanish Grade 03 Reading .....	136
Table 27. Multiple-Choice Item Analyses, English Grade 03 Writing .....	137
Table 28. Constructed-Response Item Analyses, English Grade 03 Writing .....	137
Table 29. Multiple-Choice Item Analyses, Spanish Grade 03 Writing .....	138
Table 30. Constructed-Response Item Analyses, Spanish Grade 03 Writing .....	138
Table 31. Multiple-Choice Item Analyses, English Grade 03 Mathematics .....	139
Table 32. Constructed-Response Item Analyses, English Grade 03 Mathematics .....	139
Table 33. Multiple-Choice Item Analyses, English Grade 04 Reading .....	140
Table 34. Constructed-Response Item Analyses, English Grade 04 Reading .....	141
Table 35. Multiple-Choice Item Analyses, Spanish Grade 04 Reading .....	142
Table 36. Constructed-Response Item Analyses, Spanish Grade 04 Reading .....	143
Table 37. Multiple-Choice Item Analyses, English Grade 04 Writing .....	144
Table 38. Constructed-Response Item Analyses, English Grade 04 Writing .....	144
Table 39. Multiple-Choice Item Analyses, Spanish Grade 04 Writing .....	145
Table 40. Constructed-Response Item Analyses, Spanish Grade 04 Writing .....	145
Table 41. Multiple-Choice Item Analyses, English Grade 04 Mathematics .....	146
Table 42. Constructed-Response Item Analyses, English Grade 04 Mathematics .....	147
Table 43. Multiple-Choice Item Analyses, English Grade 05 Reading .....	148
Table 44. Constructed-Response Item Analyses, English Grade 05 Reading .....	149
Table 45. Multiple-Choice Item Analyses, English Grade 05 Writing .....	150
Table 46. Constructed-Response Item Analyses, English Grade 05 Writing .....	150
Table 47. Multiple-Choice Item Analyses, English Grade 05 Mathematics .....	151
Table 48. Constructed-Response Item Analyses, English Grade 05 Mathematics .....	152

Table 49. Multiple-Choice Item Analyses, English Grade 05 Science .....	153
Table 50. Constructed-Response Item Analyses, English Grade 05 Science .....	154
Table 51. Multiple-Choice Item Analyses, English Grade 06 Reading.....	155
Table 52. Constructed-Response Item Analyses, English Grade 06 Reading.....	156
Table 53. Multiple-Choice Item Analyses, English Grade 06 Writing.....	157
Table 54. Constructed-Response Item Analyses, English Grade 06 Writing.....	157
Table 55. Multiple-Choice Item Analyses, English Grade 06 Mathematics.....	158
Table 56. Constructed-Response Item Analyses, English Grade 06 Mathematics .....	158
Table 57. Multiple-Choice Item Analyses, English Grade 07 Reading.....	159
Table 58. Constructed-Response Item Analyses, English Grade 07 Reading.....	160
Table 59. Multiple-Choice Item Analyses, English Grade 07 Writing.....	161
Table 60. Constructed-Response Item Analyses, English Grade 07 Writing.....	161
Table 61. Multiple-Choice Item Analyses, English Grade 07 Mathematics.....	162
Table 62. Constructed-Response Item Analyses, English Grade 07 Mathematics .....	162
Table 63. Multiple-Choice Item Analyses, English Grade 08 Reading.....	163
Table 64. Constructed-Response Item Analyses, English Grade 08 Reading.....	164
Table 65. Multiple-Choice Item Analyses, English Grade 08 Writing.....	165
Table 66. Constructed-Response Item Analyses, English Grade 08 Writing.....	165
Table 67. Multiple-Choice Item Analyses, English Grade 08 Mathematics.....	166
Table 68. Constructed-Response Item Analyses, English Grade 08 Mathematics .....	166
Table 69. Multiple-Choice Item Analyses, English Grade 08 Science .....	167
Table 70. Constructed-Response Item Analyses, English Grade 08 Science .....	168
Table 71. Multiple-Choice Item Analyses, English Grade 09 Reading.....	169
Table 72. Constructed-Response Item Analyses, English Grade 09 Reading.....	170
Table 73. Multiple-Choice Item Analyses, English Grade 09 Writing.....	171
Table 74. Constructed-Response Item Analyses, English Grade 09 Writing.....	171
Table 75. Multiple-Choice Item Analyses, English Grade 09 Mathematics.....	172
Table 76. Constructed-Response Item Analyses, English Grade 09 Mathematics .....	172
Table 77. Multiple-Choice Item Analyses, English Grade 10 Reading.....	173
Table 78. Constructed-Response Item Analyses, English Grade 10 Reading.....	174
Table 79. Multiple-Choice Item Analyses, English Grade 10 Writing.....	175
Table 80. Constructed-Response Item Analyses, English Grade 10 Writing.....	175
Table 81. Multiple-Choice Item Analyses, English Grade 10 Mathematics.....	176
Table 82. Constructed-Response Item Analyses, English Grade 10 Mathematics .....	176
Table 83. Multiple-Choice Item Analyses, English Grade 10 Science .....	177
Table 84. Constructed-Response Item Analyses, English Grade 10 Science .....	178
Table 85. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 3 Reading.....	179
Table 86. Item Parameter and Fit Summary, Constructed-Response Items, Grade 3 Reading.....	179
Table 87. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 3 Spanish Reading.....	180
Table 88. Item Parameter and Fit Summary, Constructed-Response Items, Grade 3 Spanish Reading.....	180
Table 89. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 3 Writing .....	181
Table 90. Item Parameter and Fit Summary, Constructed-Response Items, Grade 3 Writing .....	182
Table 91. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 3 Spanish Writing .....	183
Table 92. Item Parameter and Fit Summary, Constructed-Response Items, Grade 3 Spanish Writing .....	184
Table 93. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 3 Mathematics.....	185
Table 94. Item Parameter and Fit Summary, Constructed-Response Items, Grade 3 Mathematics.....	185
Table 95. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 4 Reading.....	186
Table 96. Item Parameter and Fit Summary, Constructed-Response Items, Grade 4 Reading.....	187
Table 97. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 4 Spanish Reading.....	188
Table 98. Item Parameter and Fit Summary, Constructed-Response Items, Grade 4 Spanish Reading.....	189
Table 99. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 4 Writing .....	190
Table 100. Item Parameter and Fit Summary, Constructed-Response Items, Grade 4 Writing.....	191
Table 101. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 4 Spanish Writing.....	192
Table 102. Item Parameter and Fit Summary, Constructed-Response Items, Grade 4 Spanish Writing.....	193
Table 103. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 4 Mathematics.....	194
Table 104. Item Parameter and Fit Summary, Constructed-Response Items, Grade 4 Mathematics.....	195

Table 105. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 5 Reading.....	196
Table 106. Item Parameter and Fit Summary, Constructed-Response Items, Grade 5 Reading.....	197
Table 107. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 5 Writing.....	198
Table 108. Item Parameter and Fit Summary, Constructed-Response Items, Grade 5 Writing.....	199
Table 109. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 5 Mathematics.....	200
Table 110. Item Parameter and Fit Summary, Constructed-Response Items, Grade 5 Mathematics....	201
Table 111. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 5 Science.....	202
Table 112. Item Parameter and Fit Summary, Constructed-Response Items, Grade 5 Science.....	203
Table 113. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 6 Reading.....	204
Table 114. Item Parameter and Fit Summary, Constructed-Response Items, Grade 6 Reading.....	205
Table 115. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 6 Writing.....	206
Table 116. Item Parameter and Fit Summary, Constructed-Response Items, Grade 6 Writing.....	207
Table 117. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 6 Mathematics.....	208
Table 118. Item Parameter and Fit Summary, Constructed-Response Items, Grade 6 Mathematics....	209
Table 119. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 7 Reading.....	210
Table 120. Item Parameter and Fit Summary, Constructed-Response Items, Grade 7 Reading.....	211
Table 121. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 7 Writing.....	212
Table 122. Item Parameter and Fit Summary, Constructed-Response Items, Grade 7 Writing.....	213
Table 123. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 7 Mathematics.....	214
Table 124. Item Parameter and Fit Summary, Constructed-Response Items, Grade 7 Mathematics....	215
Table 125. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 8 Reading.....	216
Table 126. Item Parameter and Fit Summary, Constructed-Response Items, Grade 8 Reading.....	217
Table 127. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 8 Writing.....	218
Table 128. Item Parameter and Fit Summary, Constructed-Response Items, Grade 8 Writing.....	219
Table 129. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 8 Mathematics.....	220
Table 130. Item Parameter and Fit Summary, Constructed-Response Items, Grade 8 Mathematics....	221
Table 131. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 8 Science.....	222
Table 132. Item Parameter and Fit Summary, Constructed-Response Items, Grade 8 Science.....	223
Table 133. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 9 Reading.....	224
Table 134. Item Parameter and Fit Summary, Constructed-Response Items, Grade 9 Reading.....	225
Table 135. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 9 Writing.....	226
Table 136. Item Parameter and Fit Summary, Constructed-Response Items, Grade 9 Writing.....	227
Table 137. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 9 Mathematics.....	228
Table 138. Item Parameter and Fit Summary, Constructed-Response Items, Grade 9 Mathematics....	229
Table 139. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 10 Reading.....	230
Table 140. Item Parameter and Fit Summary, Constructed-Response Items, Grade 10 Reading.....	231
Table 141. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 10 Writing.....	232
Table 142. Item Parameter and Fit Summary, Constructed-Response Items, Grade 10 Writing.....	233
Table 143. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 10 Mathematics.....	234
Table 144. Item Parameter and Fit Summary, Constructed-Response Items, Grade 10 Mathematics..	235
Table 145. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 10 Science.....	236
Table 146. Item Parameter and Fit Summary, Constructed-Response Items, Grade 10 Science.....	237
Table 147. Correlations Between the Reference and New Form Item Parameters for the 2010 CSAP Administration.....	238
Table 148. Scaling Constants Across Grades and Content Areas for Two Administrations.....	239
Table 149. CSAP Item and Anchor Count by Content Standard for Final Calibration Sample: Reading.....	240
Table 150. CSAP Item and Anchor Count by Content Standard for Final Calibration Sample: Mathematics.....	242
Table 151. CSAP Item and Anchor Count by Content Standard for Final Calibration Sample: Writing.....	244
Table 152. CSAP Item and Anchor Count by Content Standard for Final Calibration Sample: Science.....	245
Table 153. CSAP Item and Anchor Count by Content Standard for Final Calibration Sample: Reading and Writing Spanish.....	246

Table 154. Scale Score Descriptive Statistics by Gender.....	247
Table 155. Scale Score Descriptive Statistics by Content Standard.....	248
Table 156. Scale Score Descriptive Statistics by Subcontent Area.....	249
Table 157. Raw Score Descriptive Statistics by Content Standard.....	250
Table 158. Raw Score Descriptive Statistics by Subcontent Area.....	251
Table 159. Reading Grade 3 Scale Score Distribution.....	252
Table 160. Spanish Reading Grade 3 Scale Score Distribution.....	256
Table 161. Writing Grade 3 Scale Score Distribution.....	258
Table 162. Spanish Writing Grade 3 Scale Score Distribution.....	261
Table 163. Mathematics Grade 3 Scale Score Distribution.....	264
Table 164. Reading Grade 4 Scale Score Distribution.....	268
Table 165. Spanish Reading Grade 4 Scale Score Distribution.....	272
Table 166. Writing Grade 4 Scale Score Distribution.....	273
Table 167. Spanish Writing Grade 4 Scale Score Distribution.....	276
Table 168. Mathematics Grade 4 Scale Score Distribution.....	277
Table 169. Reading Grade 5 Scale Score Distribution.....	281
Table 170. Writing Grade 5 Scale Score Distribution.....	285
Table 171. Mathematics Grade 5 Scale Score Distribution.....	289
Table 172. Science Grade 5 Scale Score Distribution.....	293
Table 173. Reading Grade 6 Scale Score Distribution.....	296
Table 174. Writing Grade 6 Scale Score Distribution.....	300
Table 175. Mathematics Grade 6 Scale Score Distribution.....	304
Table 176. Reading Grade 7 Scale Score Distribution.....	308
Table 177. Writing Grade 7 Scale Score Distribution.....	312
Table 178. Mathematics Grade 7 Scale Score Distribution.....	316
Table 179. Reading Grade 8 Scale Score Distribution.....	320
Table 180. Writing Grade 8 Scale Score Distribution.....	324
Table 181. Mathematics Grade 8 Scale Score Distribution.....	328
Table 182. Science Grade 8 Scale Score Distribution.....	332
Table 183. Reading Grade 9 Scale Score Distribution.....	335
Table 184. Writing Grade 9 Scale Score Distribution.....	338
Table 185. Mathematics Grade 9 Scale Score Distribution.....	343
Table 186. Reading Grade 10 Scale Score Distribution.....	347
Table 187. Writing Grade 10 Scale Score Distribution.....	351
Table 188. Mathematics Grade 10 Scale Score Distribution.....	356
Table 189. Science Grade 10 Scale Score Distribution.....	360
Table 190. Scale Score Correlations by Content Standard and Subcontent Area, Reading Grade 3....	363
Table 191. Scale Score Correlations by Content Standard and Subcontent Area, Reading Grade 4....	363
Table 192. Scale Score Correlations by Content Standard and Subcontent Area, Reading Grade 5....	363
Table 193. Scale Score Correlations by Content Standard and Subcontent Area, Reading Grade 6....	364
Table 194. Scale Score Correlations by Content Standard and Subcontent Area, Reading Grade 7....	364
Table 195. Scale Score Correlations by Content Standard and Subcontent Area, Reading Grade 8....	364
Table 196. Scale Score Correlations by Content Standard and Subcontent Area, Reading Grade 9....	365
Table 197. Scale Score Correlations by Content Standard and Subcontent Area, Reading Grade 10..	365
Table 198. Scale Score Correlations by Content Standard and Subcontent Area, Writing Grade 3.....	366
Table 199. Scale Score Correlations by Content Standard and Subcontent Area, Writing Grade 4.....	366
Table 200. Scale Score Correlations by Content Standard and Subcontent Area, Writing Grade 5.....	366
Table 201. Scale Score Correlations by Content Standard and Subcontent Area, Writing Grade 6.....	367
Table 202. Scale Score Correlations by Content Standard and Subcontent Area, Writing Grade 7.....	367
Table 203. Scale Score Correlations by Content Standard and Subcontent Area, Writing Grade 8.....	367
Table 204. Scale Score Correlations by Content Standard and Subcontent Area, Writing Grade 9.....	368
Table 205. Scale Score Correlations by Content Standard and Subcontent Area, Writing Grade 10....	368
Table 206. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 3.....	369
Table 207. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 4.....	369

Table 208. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 5.....	369
Table 209. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 6.....	370
Table 210. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 7.....	370
Table 211. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 8.....	370
Table 212. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 9.....	371
Table 213. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 10.....	371
Table 214. Scale Score Correlations by Content Standard and Subcontent Area, Science Grade 5.....	372
Table 215. Scale Score Correlations by Content Standard and Subcontent Area, Science Grade 8.....	372
Table 216. Scale Score Correlations by Content Standard and Subcontent Area, Science Grade 10.....	372
Table 217. Scale Score Correlations by Content Standard and Subcontent Area, Spanish Reading Grade 3.....	373
Table 218. Scale Score Correlations by Content Standard and Subcontent Area, Spanish Reading Grade 4.....	373
Table 219. Scale Score Correlations by Content Standard and Subcontent Area, Spanish Writing Grade 3.....	374
Table 220. Scale Score Correlations by Content Standard and Subcontent Area, Spanish Writing Grade 4.....	374
Table 221. Cronbach Alpha Reliability Coefficients for Content Standards.....	375
Table 222. Cronbach Alpha Reliability Coefficients for Subcontent Areas.....	376
Table 223. Subgroup Reliability for the CSAP Mathematics Tests.....	377
Table 224. Subgroup Reliability for the CSAP Reading Tests.....	381
Table 225. Subgroup Reliability for the CSAP Writing Tests.....	385
Table 226. Subgroup Reliability for the CSAP Science Tests.....	389
Table 227. Subgroup Reliability for the CSAP Spanish Reading Tests.....	391
Table 228. Subgroup Reliability for the CSAP Spanish Writing Tests.....	392
Table 229. Scale Scores by Accommodation and Disability Classification.....	393
Table 230. Overall Estimates of Standard Error of Measurement.....	397
Table 231. Reading Scale Scores and Associated Standard Errors.....	398
Table 232. Writing Scale Scores and Associated Standard Errors.....	399
Table 233. Spanish Reading and Writing Scale Scores and Associated Standard Errors.....	400
Table 234. Mathematics Scale Scores and Associated Standard Errors.....	401
Table 235. Science Scale Scores and Associated Standard Errors.....	402
Table 236. Cut Scores for the 2010 CSAP Tests.....	403
Table 237. Alignment Summary, Reading and Writing.....	404
Table 238. Alignment Summary, Mathematics.....	405
Table 239. Alignment Summary, Science.....	406
Table 240. Alignment Summary, Spanish Reading and Writing.....	406
Table 241. Items Flagged for DIF by Ethnicity Focal Group.....	407
Table 242. Items Flagged for DIF by Gender Focal Group.....	408
Table 243. Items Flagged for DIF by Accommodations Focal Group.....	409
Table 244. Items Flagged for DIF by Primary Disability State.....	417
Table 245. Items Flagged for DIF by Enrollment Focal Group.....	423
Table 246. Items Flagged for DIF by Language Proficiency Focal Group.....	424
Table 247. Items Flagged for DIF by Education Plan Focal Group.....	432
Table 248. Items Flagged for DIF by Homeless, Immigrant, Migrant, Free-Lunch Eligible.....	434
Table 249. Intercorrelations among Content Areas (Scale Scores).....	440
Table 250. Intercorrelations among Content Areas (Percentile Ranks).....	441
Table 251. Intercorrelations with Demographic Variables.....	442
Table 252. Predictive Validity Coefficients.....	443
Table 253. Classification Consistency and Classification Accuracy for Mathematics Grade 3.....	444

Table 254. Classification Consistency and Classification Accuracy for Mathematics Grade 4.....	445
Table 255. Classification Consistency and Classification Accuracy for Mathematics Grade 5.....	446
Table 256. Classification Consistency and Classification Accuracy for Mathematics Grade 6.....	447
Table 257. Classification Consistency and Classification Accuracy for Mathematics Grade 7.....	448
Table 258. Classification Consistency and Classification Accuracy for Mathematics Grade 8.....	449
Table 259. Classification Consistency and Classification Accuracy for Mathematics Grade 9.....	450
Table 260. Classification Consistency and Classification Accuracy for Mathematics Grade 10.....	451
Table 261. Classification Consistency and Classification Accuracy for Reading Grade 3.....	452
Table 262. Classification Consistency and Classification Accuracy for Reading Grade 4.....	453
Table 263. Classification Consistency and Classification Accuracy for Reading Grade 5.....	454
Table 264. Classification Consistency and Classification Accuracy for Reading Grade 6.....	455
Table 265. Classification Consistency and Classification Accuracy for Reading Grade 7.....	456
Table 266. Classification Consistency and Classification Accuracy for Reading Grade 8.....	457
Table 267. Classification Consistency and Classification Accuracy for Reading Grade 9.....	458
Table 268. Classification Consistency and Classification Accuracy for Reading Grade 10.....	459
Table 269. Classification Consistency and Classification Accuracy for Science Grade 5 .....	460
Table 270. Classification Consistency and Classification Accuracy for Science Grade 8 .....	461
Table 271. Classification Consistency and Classification Accuracy for Science Grade 10 .....	462
Table 272. Classification Consistency and Classification Accuracy for Writing Grade 3.....	463
Table 273. Classification Consistency and Classification Accuracy for Writing Grade 4.....	464
Table 274. Classification Consistency and Classification Accuracy for Writing Grade 5.....	465
Table 275. Classification Consistency and Classification Accuracy for Writing Grade 6.....	466
Table 276. Classification Consistency and Classification Accuracy for Writing Grade 7 .....	467
Table 277. Classification Consistency and Classification Accuracy for Writing Grade 8.....	468
Table 278. Classification Consistency and Classification Accuracy for Writing Grade 9.....	469
Table 279. Classification Consistency and Classification Accuracy for Writing Grade 10.....	470
Table 280. Classification Consistency and Classification Accuracy for Spanish Reading Grade 3.....	471
Table 281. Classification Consistency and Classification Accuracy for Spanish Reading Grade 4.....	472
Table 282. Classification Consistency and Classification Accuracy for Spanish Writing Grade 3.....	473
Table 283. Classification Consistency and Classification Accuracy for Spanish Writing Grade 4.....	474
Table 284. Mean and Median Scale Scores by Year for Writing Subcontent Areas: Paragraph Writing and Extended Writing .....	475

<b>Table 1. The Colorado Model Content Standards and Subcontent Areas</b>		
<b>Reading</b>		
<b>Content Standards</b>		
CS	Grades	
1	3-10	Reading Comprehension
4	4-10	Thinking Skills
5	4-10	Use of Literary Information
6	4-10	Literature
<b>Subcontent Areas</b>		
SA	Grades	
1	7-10	Fiction
2	3-10	Nonfiction
3	3-10	Vocabulary
4	7-10	Poetry
1/4	3-6	Fiction and Poetry
<b>Writing</b>		
<b>Content Standards</b>		
CS	Grades	
2	3-10	Write for a Variety of Purposes
3	3-10	Write Using Conventions
<b>Subcontent Areas</b>		
SA	Grades	
5	3-10	Paragraph Writing
6	4-10	Extended Writing
7	3-10	Grammar and Usage
8	3-10	Mechanics
<b>Mathematics</b>		
<b>Content Standards</b>		
CS	Grades	
1	3-6	Number Sense
2	4-10	Algebra, Patterns, and Functions
2/3	3	Algebra, Patterns, and Functions / Statistics and Probability
3	4-10	Statistics and Probability
4/5	3-10	Geometry and Measurement
6	3-6	Computational Techniques
1/6	7-10	Number Sense and Computational Techniques

<b>Table 1. The Colorado Model Content Standards and Subcontent Areas (Concluded)</b>		
<b>Mathematics (Continued)</b>		
<b>Subcontent Areas</b>		
SA	Grades	
1	4-6	Number and Operation Sense
1	7	Number Sense
1	8	Linear Pattern Representation
1	9	Multiple Representations of Linear/Nonlinear Functions
1	10	Multiple Representations of Functions
2	4-6	Patterns
2	7	Area and Perimeter Relationships
2	8-9	Proportional Thinking
2	10	Probability and Counting Techniques
3	4	Measurement
3	5	Data Displays
3	6 and 8	Geometry
<b>Science</b>		
<b>Content Standards</b>		
CS	Grades	
1/5	5, 8, and 10	Scientific Investigation and the Nature of Science
2	5, 8, and 10	Physical Science
3	5, 8, and 10	Life Science
4	5, 8, and 10	Earth and Space Science
<b>Subcontent Areas</b>		
SA	Grades	
1	5, 8, and 10	Experimental Design and Investigations
2	5, 8, and 10	Results and Data Analysis
3	8	Physics Concepts
4	10	Chemistry Concepts
5	8 and 10	Life Processes
6	8 and 10	Geology and Astronomy



**Table 2. Configuration of 2010 CSAP Assessments**

Content Area	Grade	Maximum Possible Points	Total # of Items			Frequency of CR Items with the Given Number of Maximum Points			
			MC	CR	Total	1	2	3	4
Reading	3	52	32	8	40		4	4	0
Reading	4	91	56	14	70		7	7	0
Reading	5	91	56	14	70		7	7	0
Reading	6	91	56	14	70		8	5	1
Reading	7	91	56	14	70		9	3	0
Reading <sup>*1</sup>	8	90	55	14	69		7	7	1
Reading <sup>*2</sup>	9	93	54	14	68		3	11	0
Reading	10	95	56	14	70		3	11	0
Writing	3	56	35	9	44	6	0	0	3
Writing	4	69	40	10	50	6	0	0	3
Writing	5	68	40	10	50	6	0	0	3
Writing	6	69	40	10	50	6	0	0	3
Writing	7	69	40	10	50	6	0	0	3
Writing	8	69	40	10	50	6	0	0	3
Writing	9	69	40	10	50	6	0	0	3
Writing	10	69	40	10	50	6	0	0	3
Spanish Reading	3	52	32	8	40		4	4	
Spanish Reading	4	91	56	14	70		7	7	
Spanish Writing	3	56	35	18	53	15	3		
Spanish Writing	4	69	40	13	53	7	1		5
Mathematics	3	50	32	8	40		6	2	
Mathematics	4	96	54	15	69		6	6	3
Mathematics	5	96	54	15	69		6	6	3
Mathematics	6	87	45	15	60		6	6	3
Mathematics	7	87	45	15	60		6	6	3
Mathematics	8	87	45	15	60		6	6	3
Mathematics	9	87	45	15	60		6	6	3
Mathematics <sup>*2</sup>	10	85	43	15	58		6	6	3
Science	5	88	57	17	74	5	13		
Science	8	100	60	23	83	9	12	1	1
Science <sup>*1</sup>	10	99	59	23	82	8	14		1

\*Content area in which item(s) were removed from calibration. Count shown in this table does not include removed items.

1. 1 MC item removed  
2. 2 MC items removed

**Table 3. Configuration of 2010 CSAP Reading Assessments by Grade, Content Standard, Subcontent Area, and Item Type**

Grade	Content Area	Item Type	Content Standard								Subcontent Area									
			1		4		5		6		1		1/4		2		3		4	
			No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.
3	Reading	MC	32	32									13	13	9	9	10	10		
		CR	8	20									4	9	4	11				
4	Reading	MC	24	24	13	13	9	9	10	10			19	19	16	16	10	10		
		CR	5	15	2	5	4	9	3	8			7	19	3	7				
5	Reading	MC	20	20	12	12	15	15	9	9			23	23	8	8	10	10		
		CR	5	11	3	8	2	5	4	11			7	18	5	12				
6	Reading	MC	25	25	7	7	18	18	6	6			20	20	7	7	11	11		
		CR	2	6	5	13	1	2	6	14			9	23	4	10				
7	Reading	MC	15	15	14	14	15	15	12	12	5	5			10	10	11	11	15	15
		CR	6	16	3	6	2	5	3	8	4	9			6	13			2	8
8	Reading <sup>*1</sup>	MC	17	17	15	15	12	12	11	11	7	7			12	12	12	12	12	12
		CR	6	14	2	5	3	8	3	8	2	5			5	12			4	10
9	Reading <sup>*2</sup>	MC	14	14	13	13	18	18	9	9	9	9			9	9	10	10	9	9
		CR	6	16	3	8	1	3	4	12	5	13			6	17	0	0	2	6
10	Reading	MC	17	17	13	13	18	18	8	8	11	11			6	6	13	13	8	8
		CR	5	15	3	8	1	3	5	13	5	14			6	18	0	0	2	4
3	Spanish Reading	MC	32	32									13	13	7	7	12	12		
		CR	8	20									5	11	3	9				
4	Spanish Reading	MC	27	27	11	11	10	10	8	8			18	18	17	17	11	11		
		CR	4	10	3	7	3	8	4	10			8	20	3	7				

\*Content area in which item(s) were removed from calibration. Count shown in this table does not include removed items.

1. Removed one MC item from calibration in CS1.G SA 3V

2. Removed one MC item from calibration in CS6.d SA 4P and one item in CS1.G SA 3V

**Table 4. Configuration of 2010 CSAP Writing Assessments by Grade,  
Content Standard, Subcontent Area, and Item Type**

Grade	Content Area	Item Type	Content Standard				Subcontent Area							
			2		3		5		6		7		8	
			No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.
3	Writing	MC	12	12	23	23	6	6			8	8	15	15
		CR	9	12	9	9	3	15			3	3	3	3
4	Writing	MC	15	15	25	25	8	8			14	14	11	11
		CR	6	21	7	8	3	12	4	11	3	3	3	3
5	Writing	MC	15	15	25	25	5	5			15	15	16	16
		CR	6	21	7	8	3	12	4	11	3	3	3	3
6	Writing	MC	15	15	25	25	6	6			19	19	13	13
		CR	6	21	7	8	3	12	4	11	3	3	3	3
7	Writing	MC	15	15	25	25	7	7			21	21	10	10
		CR	6	21	7	8	3	12	4	11	3	3	3	3
8	Writing	MC	15	15	25	25	10	10			16	16	14	14
		CR	6	21	7	8	3	12	4	11	3	3	3	3
9	Writing	MC	15	15	25	25	7	7			19	19	14	14
		CR	6	21	7	8	3	12	4	11	3	3	3	3
10	Writing	MC	15	15	25	25	8	8			19	19	10	10
		CR	6	21	7	8	3	12	4	11	2	2	4	4
3	Spanish Writing	MC	12	12	23	23					17	17	7	7
		CR	9	12	9	9	12	15			3	3	3	3
4	Spanish Writing	MC	13	13	27	27	6	6			15	15	12	12
		CR	6	21	7	8	3	12	4	11	4	4	2	2

**Table 5. Configuration of 2010 CSAP Mathematics Assessments by Grade, Content Standard, Subcontent Area, and Item Type**

			Content Standard														Subcontent Area					
			1		1/6		2		2/3		3		4/5		6		1		2		3	
			No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.
Grade	Content Area	Item Type																				
3	Mathematics	MC	6	6					9	9			12	12	5	5						
		CR	2	4					2	4			2	5	2	5						
4	Mathematics	MC	10	10			6	6			9	9	17	17	12	12	11	11	5	5	4	4
		CR	4	10			3	8			2	5	4	12	2	7	6	17	3	8	2	7
5	Mathematics	MC	14	14			7	7			7	7	12	12	14	14	13	13	4	4	3	3
		CR	2	5			4	11			4	12	3	9	2	5	1	2	4	11	4	12
6	Mathematics	MC	11	11			6	6			7	7	12	12	9	9	9	9	5	5	5	5
		CR	2	7			4	12			3	9	4	10	2	4	3	9	4	12	3	8
7	Mathematics	MC			15	15	9	9			9	9	12	12			5	5	6	6		
		CR			4	11	3	8			3	9	5	14			3	9	5	14		
8	Mathematics	MC			11	11	11	11			9	9	14	14			7	7	8	8	1	1
		CR			4	11	4	11			3	8	4	12			4	11	2	7	3	9
9	Mathematics	MC			10	10	12	12			12	12	11	11			2	2	7	7		
		CR			3	7	5	14			3	9	4	12			5	15	4	11		
10	Mathematics* <sup>1</sup>	MC			10	10	12	12			10	10	11	11			5	5	6	6		
		CR			2	5	5	14			4	11	4	12			3	11	2	4		

\*Content area in which item(s) were removed from calibration. Count shown in this table does not include removed items.

1. Removed one MC item from calibration in CS4/5 and one MC item from calibration in CS3- SA2

**Table 6. Configuration of 2010 CSAP Science Assessments by Grade, Content Standard, Subcontent Area, and Item Type**

Grade	Content Area	Item Type	Content Standard								Subcontent Area											
			1/5		2		3		4		1		2		3		4		5		6	
			No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.
5	Science	MC	21	21	12	12	12	12	12	12	13	13	5	5								
		CR	9	15	3	6	3	5	3	5	3	4	5	9								
8	Science	MC	23	23	14	14	12	12	11	11	11	11	9	9	7	7			8	8	6	6
		CR	9	16	4	6	5	8	5	10	6	9	3	7	4	6			3	4	3	6
10	Science <sup>*1</sup>	MC	20	20	12	12	14	14	13	13	9	9	6	6			7	7	6	6	7	7
		CR	13	22	3	6	3	5	4	7	5	9	7	12					2	4	3	6

\*Content area in which item was removed from calibration. Count shown in this table does not include removed items.

1. Removed one MC item from calibration in CS2 – SA4

**Table 7. Percentage of Items in Depth of Knowledge Levels**

Tests		Grade		DOK Level				Number of Items in Test		
				1		2			3	
				MC	CR	MC	CR		MC	CR
Reading	3	27%	7%	52%	7%	0%	5%	40		
	4	37%	4%	37%	8%	5%	7%	70		
	5	27%	7%	45%	5%	7%	7%	70		
	6	34%	2%	41%	4%	4%	12%	70		
	7	30%	1%	35%	11%	14%	7%	70		
	8 <sup>*1</sup>	14%	0%	57%	14%	7%	5%	69		
	9 <sup>*1</sup>	28%	1%	44%	4%	5%	14%	69		
	10	21%	0%	48%	4%	10%	15%	70		
Writing	3	63%	13%	15%	0%	0%	6%	44		
	4	64%	12%	16%	0%	0%	8%	50		
	5	60%	12%	20%	0%	0%	8%	50		
	6	54%	12%	26%	0%	0%	8%	50		
	7	60%	12%	18%	0%	2%	8%	50		
	8	54%	12%	26%	0%	0%	8%	50		
	9	60%	12%	18%	0%	2%	8%	50		
	10	56%	12%	22%	0%	2%	8%	50		
Mathematics	3	30%	0%	45%	15%	5%	6%	40		
	4	35%	0%	42%	12%	2%	10%	69		
	5	29%	0%	49%	10%	0%	12%	69		
	6	15%	2%	57%	17%	3%	7%	60		
	7	20%	0%	48%	13%	7%	12%	60		
	8	20%	0%	53%	8%	2%	17%	60		
	9	13%	0%	53%	13%	8%	12%	60		
	10	14%	0%	48%	17%	12%	9%	58		
Science	5	39%	8%	37%	14%	1%	1%	74		
	8	23%	10%	39%	13%	11%	5%	83		
	10	29%	2%	43%	17%	0%	9%	82		
Spanish Reading	3	0%	0%	80%	20%	0%	0%	40		
	4	33%	1%	39%	17%	9%	1%	70		
Spanish Writing	3	66%	17%	0%	17%	0%	0%	53		
	4	64%	13%	11%	9%	0%	2%	53		

**Table 8. Percentage of Score Points in Depth of Knowledge Levels**

Tests	Grade	DOK Level						Total Number of Points in Test
		1		2		3		
		MC	CR	MC	CR	MC	CR	
Reading	3	21%	15%	40%	15%	0%	13%	52
	4	28%	7%	28%	15%	4%	15%	91
	5	20%	12%	35%	12%	5%	14%	91
	6	26%	5%	31%	6%	3%	21%	91
	7	23%	2%	27%	23%	10%	13%	91
	8	10%	0%	44%	27%	5%	10%	90
	9	21%	3%	32%	8%	4%	29%	94
	10	15%	0%	35%	8%	7%	32%	95
Writing	3	50%	10%	12%	0%	0%	26%	56
	4	46%	8%	11%	0%	0%	33%	69
	5	43%	8%	14%	0%	0%	33%	69
	6	39%	8%	18%	0%	0%	33%	69
	7	43%	8%	13%	0%	1%	33%	69
	8	39%	8%	18%	0%	0%	33%	69
	9	43%	8%	13%	0%	1%	33%	69
	10	40%	8%	15%	0%	1%	33%	69
Mathematics	3	24%	0%	36%	26%	4%	10%	50
	4	25%	0%	30%	22%	1%	22%	96
	5	21%	0%	35%	18%	0%	26%	96
	6	10%	2%	39%	30%	2%	16%	87
	7	14%	0%	33%	22%	5%	26%	87
	8	14%	0%	37%	13%	1%	36%	87
	9	9%	0%	37%	22%	6%	26%	87
	10	9%	0%	33%	29%	8%	20%	85
Science	5	26%	6%	36%	16%	2%	14%	88
	8	19%	7%	31%	11%	10%	22%	100
	10	14%	1%	43%	24%	2%	15%	99
Spanish Reading	3	0%	0%	62%	39%	0%	0%	52
	4	25%	2%	30%	34%	7%	2%	91
Spanish Writing	3	63%	16%	0%	21%	0%	0%	56
	4	49%	12%	9%	29%	0%	1%	69

**Table 9. Previously Administered Items Selected for 2010 Test Forms  
that were Flagged for DIF or Fit**

Language	Content Area	Grade	Item Type	2009 Item	2009 Anchor	Year Flagged	DIF Flag*	Fit Flag*
English	Mathematics	3	CR	20	yes	2008	E	0
English	Mathematics	4	CR	40		2008	G	0
English	Mathematics	4	CR	65		2008	E	1
English	Mathematics	5	CR	20		2008	E	0
English	Mathematics	5	CR	27		2008	0	1
English	Mathematics	5	MC	32		2008	0	1
English	Mathematics	5	CR	46		2008	E	0
English	Mathematics	5	CR	66		2008	0	1
English	Mathematics	6	MC	9		2008	0	1
English	Mathematics	6	CR	29		2008	0	1
English	Mathematics	6	CR	46		2008	0	1
English	Mathematics	7	MC	18		2008	0	1
English	Mathematics	7	CR	20		2008	0	1
English	Mathematics	7	CR	35		2008	0	1
English	Mathematics	7	CR	40		2008	0	1
English	Mathematics	8	MC	3		2008	0	1
English	Mathematics	8	CR	34		2008	0	1
English	Mathematics	8	CR	40		2008	0	1
English	Mathematics	8	MC	46		2008	0	1
English	Mathematics	8	CR	60		2008	0	1
English	Mathematics	9	CR	20		2008	0	1
English	Mathematics	9	CR	32		2008	G	0
English	Mathematics	9	CR	46		2008	0	1
English	Mathematics	9	MC	57		2008	0	1
English	Mathematics	10	MC	13		2008	E	1
English	Mathematics	10	CR	20		2008	E	0
English	Mathematics	10	CR	40		2008	E,G	0
English	Mathematics	10	CR	48		2008	G	0
English	Reading	3	CR	6		2008	0	1
English	Reading	3	CR	25		2008	G	0
English	Reading	3	CR	26		2008	0	1
English	Reading	4	CR	11		2008	G	0
English	Reading	4	CR	24		2008	E	0
English	Reading	5	CR	11		2008	G	0
English	Reading	6	CR	11		2008	G	0
English	Reading	6	MC	102		2008	G	0
English	Reading	7	CR	99		2008	E,G	0

\* 0=No Flag; E=Flagged for Ethnicity; G=Flagged for Gender; 1=Flagged for Fit



**Table 9. Previously Administered Items Selected for 2010 Test Forms  
that were Flagged for DIF or Fit (Continued)**

Language	Content Area	Grade	Item Type	2009 Item	2009 Anchor	Year Flagged	DIF Flag*	Fit Flag*
English	Reading	8	MC	16	yes	2008	G	0
English	Reading	8	CR	28		2008	E,G	0
English	Reading	9	SR	6	yes	2008	G	0
English	Reading	9	CR	100		2008	E,G	0
English	Reading	10	CR	5		2008	G	0
English	Reading	10	CR	96		2005	E,G	0
English	Science	8	CR	24		2008	G	0
English	Science	8	CR	63		2008	0	1
English	Science	8	MC	68		2009	0	1
English	Science	10	CR	21		2008	G	0
English	Science	10	CR	22		2008	E	0
English	Science	10	CR	24		2008	E	0
English	Writing	4	MC	55		2008	G	0
English	Writing	5	MC	54		2008	E	0
English	Writing	5	SCR	64		2008	E	0
English	Writing	6	SCR	27		2008	0	1
English	Writing	6	SCR	77		2008	E,G	0
English	Writing	7	SCR	68		2008	E,G	0
English	Writing	9	SCR	25		2008	G	1
English	Writing	9	SCR	68		2008	G	0
English	Writing	9	MC	52		2008	E	0

\* 0=No Flag; E=Flagged for Ethnicity; G=Flagged for Gender; 1=Flagged for Fit

**Table 9. Previously Administered Items Selected for 2010 Test Forms  
that were Flagged for DIF or Fit (Continued)**

Language	Content Area	Grade	Item Type	2009 Item	2009 Anchor	Year Flagged	DIF Flag*	Fit Flag*
Spanish	Reading	3	CR	1		2007, 2008	0	1
Spanish	Reading	3	MC	7	yes	2004	0	1
Spanish	Reading	3	MC	14		2007	0	1
Spanish	Reading	3	MC	20	yes	2007	0	1
Spanish	Reading	3	MC	24	yes	2008	0	1
Spanish	Reading	3	CR	26		2002, 2003, 2006	0	1
Spanish	Reading	3	CR	32		2008	0	1
Spanish	Reading	3	CR	36		2008	0	1
Spanish	Reading	4	MC	15	yes	2005	0	1
Spanish	Reading	4	MC	19	yes	2008	0	1
Spanish	Reading	4	MC	21	yes	2008	0	1
Spanish	Reading	4	MC	23	yes	2004	0	1
Spanish	Reading	4	MC	26		2003, 2008	0	1
Spanish	Reading	4	MC	28	yes	2005, 2007	0	1
Spanish	Reading	4	MC	32		2008	0	1
Spanish	Reading	4	MC	38		2008	0	1
Spanish	Reading	4	MC	40		2008	0	1
Spanish	Reading	4	CR	42		2008	0	1
Spanish	Reading	4	CR	44		2004, 2008	0	1
Spanish	Reading	4	MC	46		2008	0	1
Spanish	Reading	4	MC	48		2004	0	1
Spanish	Reading	4	MC	92		2003, 2004	0	1
Spanish	Reading	4	MC	93	yes	2008	0	1
Spanish	Reading	4	MC	94		2003	0	1
Spanish	Reading	4	MC	95	yes	2008	0	1
Spanish	Reading	4	MC	102		2008	0	1
Spanish	Reading	4	MC	103		2008	0	1
Spanish	Reading	4	MC	107	yes	2005	0	1
Spanish	Reading	4	MC	110		2008	0	1
Spanish	Reading	4	MC	111		2008	0	1
Spanish	Reading	4	MC	113		2004	0	1
Spanish	Reading	4	MC	114		2008	0	1
Spanish	Writing	3	MC	6		2008	0	1
Spanish	Writing	3	CR	27A		2007	0	1
Spanish	Writing	3	MC	34		2004	0	1
Spanish	Writing	4	CR	2F		2008	0	1
Spanish	Writing	4	CR	3A		2005	0	1
Spanish	Writing	4	MC	52	yes	2005	0	1

\* 0=No Flag; E=Flagged for Ethnicity; G=Flagged for Gender; 1=Flagged for Fit

**Table 9. Previously Administered Items Selected for 2010 Test Forms  
that were Flagged for DIF or Fit (Concluded)**

Language	Content Area	Grade	Item Type	2009 Item	2009 Anchor	Year Flagged	DIF Flag*	Fit Flag*
Spanish	Writing	4	MC	55	yes	2005	0	1
Spanish	Writing	4	MC	57		2008	0	1
Spanish	Writing	4	MC	58		2008	0	1
Spanish	Writing	4	MC	60		2008	0	1
Spanish	Writing	4	MC	61		2005	0	1
Spanish	Writing	4	MC	65	yes	2005	G	0
Spanish	Writing	4	MC	71	yes	2004	0	1
						2004,		
Spanish	Writing	4	MC	74		2008	0	1
Spanish	Writing	4	MC	75		2008	0	1
						2005,		
Spanish	Writing	4	MC	76		2008	0	1
						2004,		
Spanish	Writing	4	MC	79		2008	0	1
Spanish	Writing	4	MC	83		2008	0	1
Spanish	Writing	4	MC	85		2004	0	1
Spanish	Writing	4	MC	87		2008	0	1
Spanish	Writing	4	MC	89		2008	0	1

\* 0=No Flag; E=Flagged for Ethnicity; G=Flagged for Gender; 1=Flagged for Fit

**Table 10. Lowest and Highest Obtainable Scale Scores for the CSAP Assessments**

Grade	Content Area	LOSS	HOSS
3	Reading	150	795
4	Reading	180	940
5	Reading	220	955
6	Reading	260	970
7	Reading	300	980
8	Reading	330	990
9	Reading	350	995
10	Reading	370	999
3	Spanish Reading	300	740
4	Spanish Reading	300	790
3	Writing	150	680
4	Writing	190	730
5	Writing	220	780
6	Writing	230	840
7	Writing	240	890
8	Writing	250	910
9	Writing	260	930
10	Writing	270	950
3	Spanish Writing	250	750
4	Spanish Writing	300	790
3	Mathematics	150	700
4	Mathematics	180	780
5	Mathematics	220	800
6	Mathematics	240	830
7	Mathematics	280	860
8	Mathematics	310	890
9	Mathematics	340	920
10	Mathematics	370	950
5	Science	300	900
8	Science	300	900
10	Science	300	900

**Table 11. Rater Reliability Statistics – Mathematics**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
3	4	3128	2	1.14	1.15	0.89	0.89	0.93	91.46	8.12	99.58
3	9	3129	2	0.83	0.83	0.62	0.62	0.93	95.94	3.96	99.90
3	16	3120	2	0.83	0.83	0.85	0.85	0.85	82.20	17.42	99.62
3	20	3129	3	1.51	1.53	0.99	1.00	0.90	86.19	12.66	98.85
3	24	3121	2	0.70	0.70	0.73	0.73	0.93	95.32	4.61	99.93
3	26	3125	2	1.49	1.48	0.66	0.67	0.88	91.52	8.32	99.84
3	33	3125	2	1.57	1.57	0.63	0.63	0.93	96.48	3.52	100.00
3	40	3126	3	1.83	1.84	0.89	0.89	0.92	90.98	8.83	99.81
4	5	3097	2	1.48	1.48	0.74	0.74	0.93	95.57	4.33	99.90
4	11	3094	2	0.92	0.93	0.78	0.78	0.91	92.53	7.37	99.90
4	15	3106	3	2.29	2.29	0.78	0.79	0.85	85.22	14.55	99.77
4	18	3104	3	1.93	1.92	0.93	0.94	0.90	88.11	11.47	99.58
4	23	3100	4	1.98	1.98	1.19	1.19	0.94	93.81	5.94	99.75
4	28	3100	3	0.91	0.93	1.05	1.05	0.89	85.09	13.94	99.03
4	30	3078	2	1.54	1.55	0.71	0.71	0.82	87.56	12.18	99.74
4	33	3121	2	0.70	0.70	0.73	0.73	0.93	95.32	4.61	99.93
4	40	3104	3	1.02	1.02	1.12	1.15	0.84	74.00	22.36	96.36
4	46	3105	4	2.68	2.70	1.29	1.29	0.91	79.94	18.97	98.91
4	49	3106	2	1.49	1.49	0.62	0.62	0.82	87.22	12.78	100.00
4	55	3126	3	1.83	1.84	0.89	0.89	0.92	90.98	8.83	99.81
4	60	3125	2	1.57	1.57	0.63	0.63	0.93	96.48	3.52	100.00
4	65	3101	3	1.71	1.70	1.19	1.20	0.92	85.48	13.77	99.25
4	69	3103	4	2.53	2.54	1.29	1.28	0.95	91.49	7.93	99.42
5	5	2968	2	1.35	1.34	0.67	0.67	0.85	88.84	10.99	99.83
5	10	2959	3	2.06	2.06	0.89	0.89	0.77	76.57	21.33	97.90
5	17	2968	2	1.48	1.45	0.75	0.76	0.82	83.36	15.77	99.13
5	20	2965	3	1.08	1.09	1.11	1.11	0.85	75.45	22.33	97.78
5	23	3105	4	2.68	2.70	1.29	1.29	0.91	79.94	18.97	98.91
5	27	2967	2	1.01	1.01	0.88	0.88	0.92	90.62	9.04	99.66
5	33	2969	3	1.13	1.14	1.03	1.04	0.90	87.40	10.58	97.98
5	35	3078	2	1.54	1.55	0.71	0.71	0.82	87.56	12.18	99.74
5	39	2977	3	1.19	1.20	1.01	1.01	0.93	87.24	12.56	99.80
5	46	2973	4	2.35	2.34	1.18	1.18	0.86	70.30	27.65	97.95
5	49	2974	2	1.11	1.12	0.91	0.90	0.89	84.06	15.47	99.53
5	54	2969	3	2.08	2.09	1.05	1.06	0.88	83.63	13.98	97.61
5	60	2963	2	1.38	1.39	0.75	0.74	0.83	83.49	16.31	99.80
5	66	3101	3	1.71	1.70	1.19	1.20	0.92	85.48	13.77	99.25
5	69	2969	4	2.76	2.77	1.20	1.20	0.91	82.82	16.61	99.43

**Table 11. Rater Reliability Statistics – Mathematics (Continued)**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
6	4	2949	2	1.72	1.72	0.52	0.52	0.88	96.23	3.46	99.69
6	7	2959	3	2.06	2.06	0.89	0.89	0.77	76.57	21.33	97.90
6	13	2945	2	0.66	0.68	0.81	0.81	0.86	86.49	12.87	99.36
6	16	2910	3	1.40	1.40	1.27	1.27	0.90	85.32	13.93	99.25
6	20	2956	4	1.99	1.99	1.04	1.05	0.90	84.57	14.99	99.56
6	23	2951	2	1.14	1.15	0.95	0.95	0.95	94.71	4.91	99.62
6	29	2977	3	1.19	1.20	1.01	1.01	0.93	87.24	12.56	99.80
6	33	2953	2	1.29	1.29	0.81	0.81	0.82	84.21	13.55	97.76
6	37	2949	3	2.29	2.28	1.02	1.02	0.86	85.35	11.09	96.44
6	40	2951	4	1.29	1.30	1.04	1.05	0.83	78.96	18.03	96.99
6	43	2944	2	1.44	1.43	0.82	0.82	0.95	96.06	3.91	99.97
6	46	2948	2	1.19	1.19	0.84	0.85	0.94	94.74	5.20	99.94
6	49	2969	3	1.13	1.14	1.03	1.04	0.90	87.40	10.58	97.98
6	57	2940	3	1.02	1.02	0.82	0.82	0.83	83.90	15.76	99.66
6	60	2957	4	2.50	2.52	1.16	1.16	0.93	87.93	11.53	99.46
7	3	2945	2	0.66	0.68	0.81	0.81	0.86	86.49	12.87	99.36
7	7	2940	3	1.02	1.02	0.82	0.82	0.83	83.90	15.76	99.66
7	11	2857	2	1.15	1.14	0.87	0.87	0.76	79.20	18.24	97.44
7	14	2918	3	1.19	1.19	1.11	1.11	0.92	91.71	7.75	99.46
7	20	2893	4	1.23	1.24	1.24	1.24	0.83	81.45	16.68	98.13
7	25	2953	2	1.29	1.29	0.81	0.81	0.82	84.21	13.55	97.76
7	29	2914	3	1.14	1.16	0.88	0.88	0.77	75.52	23.72	99.24
7	33	2924	2	1.20	1.20	0.64	0.64	0.87	92.68	7.28	99.96
7	35	2926	3	1.99	2.00	0.88	0.89	0.88	90.43	9.19	99.62
7	40	2914	4	1.04	1.05	1.49	1.48	0.89	85.51	10.47	95.98
7	45	2922	2	0.64	0.64	0.76	0.77	0.89	91.55	8.15	99.70
7	49	2915	3	0.75	0.75	0.91	0.90	0.85	88.23	11.12	99.35
7	51	2899	2	0.55	0.54	0.82	0.82	0.84	89.12	9.15	98.27
7	55	2920	3	1.41	1.42	1.11	1.11	0.90	85.68	13.70	99.38
7	60	2897	4	2.08	2.09	1.36	1.36	0.84	80.28	14.68	94.96
8	4	2847	3	2.07	2.06	0.91	0.92	0.75	71.82	25.79	97.61
8	8	2857	2	1.15	1.14	0.87	0.87	0.76	79.20	18.24	97.44
8	13	2810	3	0.85	0.85	0.87	0.86	0.72	74.68	23.18	97.86
8	17	2743	2	0.40	0.40	0.77	0.77	0.79	94.96	2.56	97.52
8	20	2893	4	1.23	1.24	1.24	1.24	0.83	81.45	16.68	98.13
8	24	2832	2	0.99	0.99	0.68	0.67	0.85	91.35	8.55	99.90
8	26	2811	3	0.71	0.72	0.85	0.85	0.79	85.62	13.60	99.22
8	30	2817	2	0.46	0.48	0.66	0.67	0.79	89.34	9.77	99.11
8	34	2819	3	1.58	1.58	1.11	1.11	0.88	87.58	11.50	99.08
8	40	2842	4	2.37	2.36	0.91	0.92	0.83	87.25	12.32	99.57
8	44	2924	2	1.20	1.20	0.64	0.64	0.87	92.68	7.28	99.96
8	48	2836	3	1.85	1.84	0.94	0.94	0.89	91.29	8.46	99.75
8	51	2819	2	0.84	0.83	0.87	0.87	0.81	80.73	18.35	99.08
8	55	2820	3	1.16	1.15	0.99	0.99	0.72	65.96	30.53	96.49
8	60	2817	4	1.99	1.98	1.63	1.63	0.88	78.13	18.03	96.16

**Table 11. Rater Reliability Statistics – Mathematics (Concluded)**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
9	3	2983	2	0.92	0.93	0.85	0.84	0.85	87.85	11.72	99.57
9	8	2882	3	1.11	1.11	1.28	1.28	0.83	92.60	5.53	98.13
9	11	2819	2	0.84	0.83	0.87	0.87	0.81	80.73	18.35	99.08
9	14	2851	3	0.48	0.48	0.84	0.84	0.65	84.44	14.33	98.77
9	20	2971	4	1.98	2.00	1.31	1.31	0.85	82.35	16.94	99.29
9	23	2832	2	0.99	0.99	0.68	0.67	0.85	91.35	8.55	99.90
9	26	2811	3	0.71	0.72	0.85	0.85	0.79	85.62	13.60	99.22
9	32	2855	2	0.60	0.60	0.76	0.76	0.73	87.25	12.15	99.40
9	35	2971	3	1.44	1.44	1.15	1.15	0.81	71.85	26.94	98.79
9	40	2922	4	0.62	0.62	1.19	1.19	0.79	90.54	8.70	99.24
9	43	2794	2	0.34	0.33	0.56	0.56	0.66	94.68	5.25	99.93
9	46	2935	3	0.76	0.76	1.01	1.01	0.77	86.29	10.74	97.03
9	50	2949	2	0.87	0.88	0.73	0.73	0.85	95.48	4.38	99.86
9	54	2928	3	0.99	1.00	0.82	0.83	0.61	70.41	26.23	96.64
9	60	2928	4	1.19	1.18	1.02	1.01	0.67	73.48	23.07	96.55
10	4	2746	2	1.41	1.40	0.85	0.86	0.81	89.79	7.98	97.77
10	9	2757	3	1.08	1.08	1.05	1.05	0.87	96.55	3.12	99.67
10	14	2741	2	0.06	0.06	0.30	0.30	0.63	98.61	1.21	99.82
10	18	2735	3	0.54	0.54	0.75	0.74	0.73	90.74	8.97	99.71
10	20	2747	4	0.67	0.67	1.24	1.24	0.83	93.55	6.05	99.60
10	25	2983	2	0.92	0.93	0.85	0.84	0.85	87.85	11.72	99.57
10	28	2744	3	1.17	1.16	0.80	0.80	0.75	88.61	11.24	99.85
10	32	2728	2	0.67	0.69	0.59	0.59	0.67	86.30	13.29	99.59
10	36	2882	3	1.11	1.11	1.28	1.28	0.83	92.60	5.53	98.13
10	40	2713	4	1.30	1.34	1.44	1.44	0.78	72.39	24.54	96.93
10	45	2734	2	0.64	0.64	0.83	0.83	0.83	90.97	8.52	99.49
10	48	2733	3	1.70	1.71	1.27	1.27	0.86	89.05	10.18	99.23
10	52	2646	2	0.58	0.58	0.87	0.87	0.82	97.08	2.43	99.51
10	57	2935	3	0.76	0.76	1.01	1.01	0.77	86.29	10.74	97.03
10	60	2729	4	1.58	1.58	0.92	0.93	0.67	76.43	22.14	98.57

**Table 12. Rater Reliability Statistics – Reading**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
3	1	3029	3	1.19	1.20	1.06	1.05	0.81	74.04	22.85	96.89
3	6	3030	2	1.24	1.25	0.73	0.73	0.86	88.71	11.06	99.77
3	10	2991	2	0.82	0.83	0.59	0.60	0.67	81.51	18.19	99.70
3	14	2968	2	0.80	0.80	0.88	0.87	0.88	92.77	6.89	99.66
3	25	3031	3	1.30	1.29	1.03	1.03	0.86	79.91	19.27	99.18
3	26	3015	3	1.50	1.49	1.34	1.34	0.95	97.01	2.85	99.86
3	31	2993	2	0.57	0.56	0.64	0.63	0.58	73.13	25.49	98.62
3	35	3007	3	1.95	1.96	1.13	1.13	0.87	82.40	16.61	99.01
4	10	3057	2	1.22	1.23	0.74	0.74	0.57	64.21	32.22	96.43
4	11	3039	3	1.23	1.24	0.79	0.80	0.57	58.31	39.12	97.43
4	15	2930	2	0.77	0.79	0.62	0.63	0.49	64.86	34.28	99.14
4	20	3009	3	1.43	1.43	1.16	1.16	0.76	67.22	28.15	95.37
4	22	2982	3	1.19	1.20	0.85	0.84	0.66	72.13	25.96	98.09
4	24	3029	3	1.19	1.20	1.06	1.05	0.81	74.04	22.85	96.89
4	29	3030	2	1.24	1.25	0.73	0.73	0.86	88.71	11.06	99.77
4	32	3056	2	0.80	0.79	0.60	0.61	0.63	75.74	23.77	99.51
4	39	3053	3	1.26	1.26	0.84	0.84	0.64	66.21	30.58	96.79
4	44	3054	2	1.35	1.36	0.82	0.81	0.75	79.86	16.51	96.37
4	102	3066	2	1.66	1.67	0.64	0.64	0.82	89.10	10.25	99.35
4	103	3007	3	1.95	1.96	1.13	1.13	0.87	82.40	16.61	99.01
4	115	3029	2	1.33	1.32	0.83	0.83	0.90	94.97	4.87	99.84
4	116	3046	3	1.14	1.14	0.79	0.78	0.60	65.03	31.98	97.01
5	4	2978	2	0.71	0.71	0.80	0.80	0.83	84.25	14.51	98.76
5	6	2954	3	1.16	1.15	0.76	0.76	0.72	77.88	21.58	99.46
5	10	2987	3	1.23	1.24	1.09	1.09	0.88	81.27	17.63	98.90
5	11	2964	3	1.71	1.71	1.11	1.10	0.88	84.27	15.19	99.46
5	12	2966	3	1.29	1.29	0.88	0.88	0.75	71.95	27.21	99.16
5	23	2930	2	0.77	0.79	0.62	0.63	0.49	64.86	34.28	99.14
5	28	2981	2	0.71	0.70	0.62	0.64	0.49	64.83	33.49	98.32
5	35	2922	3	0.85	0.85	0.80	0.80	0.64	74.84	21.94	96.78
5	43	3053	3	1.26	1.26	0.84	0.84	0.64	66.21	30.58	96.79
5	48	3054	2	1.35	1.36	0.82	0.81	0.75	79.86	16.51	96.37
5	95	2969	2	1.36	1.37	0.89	0.88	0.91	92.82	6.47	99.29
5	96	2981	2	1.35	1.35	0.75	0.75	0.91	93.86	6.04	99.90
5	105	2969	2	1.47	1.46	0.76	0.76	0.88	91.61	7.88	99.49
5	106	2964	3	1.20	1.19	0.92	0.93	0.72	68.02	29.08	97.10



**Table 12. Rater Reliability Statistics – Reading (Continued)**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
6	4	2978	2	0.71	0.71	0.80	0.80	0.83	84.25	14.51	98.76
6	6	2954	3	1.16	1.15	0.76	0.76	0.72	77.88	21.58	99.46
6	11	2873	3	1.09	1.10	1.05	1.05	0.80	77.28	18.85	96.13
6	12	2885	3	2.18	2.18	1.12	1.12	0.89	83.36	15.64	99.00
6	18	2860	2	1.11	1.08	0.76	0.77	0.69	69.41	30.03	99.44
6	24	2806	2	1.18	1.17	0.84	0.83	0.62	67.41	28.38	95.79
6	29	2981	2	0.71	0.70	0.62	0.64	0.49	64.83	33.49	98.32
6	32	2875	3	0.61	0.61	0.91	0.89	0.71	75.77	19.14	94.91
6	36	2865	2	0.98	0.98	0.83	0.83	0.86	87.74	11.70	99.44
6	93	2884	3	1.48	1.50	1.01	1.03	0.67	65.14	26.05	91.19
6	94	2866	2	1.26	1.26	0.83	0.84	0.90	92.18	7.50	99.68
6	106	2867	4	1.57	1.56	1.11	1.11	0.75	67.03	28.51	95.54
6	110	2845	2	0.72	0.73	0.74	0.75	0.69	73.18	25.84	99.02
6	111	2857	2	0.76	0.75	0.61	0.62	0.45	61.90	37.04	98.94
7	4	2895	3	2.07	2.05	1.05	1.06	0.82	76.31	21.99	98.30
7	5	2915	2	1.52	1.51	0.67	0.68	0.62	73.71	23.71	97.42
7	6	2896	3	0.94	0.93	0.82	0.80	0.74	76.86	22.03	98.89
7	11	2866	2	1.47	1.46	0.75	0.75	0.61	71.05	25.14	96.19
7	12	2886	2	1.05	1.06	0.69	0.70	0.60	68.46	29.98	98.44
7	13	2881	2	1.46	1.47	0.80	0.79	0.82	88.30	9.72	98.02
7	25	2860	4	1.36	1.39	0.91	0.91	0.64	68.57	27.55	96.12
7	34	2803	2	0.77	0.76	0.74	0.74	0.64	70.32	28.36	98.68
7	37	2789	2	1.06	1.04	0.59	0.59	0.52	70.36	29.17	99.53
7	40	2886	2	0.86	0.87	0.72	0.73	0.68	74.39	24.18	98.57
7	90	2892	3	1.02	1.02	1.15	1.15	0.75	73.17	18.71	91.88
7	99	2867	4	1.57	1.56	1.11	1.11	0.75	67.03	28.51	95.54
7	111	2845	2	0.72	0.73	0.74	0.75	0.69	73.18	25.84	99.02
7	112	2857	2	0.76	0.75	0.61	0.62	0.45	61.90	37.04	98.94
8	6	2852	2	0.92	0.94	0.78	0.78	0.56	60.82	34.86	95.68
8	13	2849	3	1.51	1.50	0.83	0.83	0.65	67.94	28.97	96.91
8	14	2856	2	1.77	1.76	0.52	0.52	0.69	87.50	12.05	99.55
8	22	2856	2	1.14	1.15	0.70	0.69	0.64	70.37	28.65	99.02
8	24	2802	3	0.78	0.78	0.80	0.81	0.62	71.51	26.13	97.64
8	28	2817	3	1.99	1.98	1.00	1.00	0.79	79.02	19.91	98.93
8	30	2738	2	1.09	1.09	0.95	0.94	0.83	89.71	9.70	99.41
8	38	2803	2	0.77	0.76	0.74	0.74	0.64	70.32	28.36	98.68
8	40	2816	3	1.38	1.36	0.95	0.96	0.63	57.89	37.42	95.31
8	42	2789	2	1.06	1.04	0.59	0.59	0.52	70.36	29.17	99.53
8	47	2713	3	0.86	0.87	0.89	0.90	0.60	67.83	28.74	96.57
8	93	2892	3	1.02	1.02	1.15	1.15	0.75	73.17	18.71	91.88
8	104	2775	2	0.78	0.79	0.65	0.65	0.70	84.60	15.15	99.75
8	109	2800	3	2.05	2.05	1.08	1.08	0.77	75.69	21.38	97.07

**Table 12. Rater Reliability Statistics – Reading (Concluded)**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
9	4	2849	3	1.51	1.50	0.83	0.83	0.65	67.94	28.97	96.91
9	7	2856	2	1.77	1.76	0.52	0.52	0.69	87.50	12.05	99.55
9	19	2906	3	1.46	1.47	1.15	1.16	0.80	80.43	17.81	98.24
9	29	2713	3	0.86	0.87	0.89	0.90	0.60	67.83	28.74	96.57
9	42	2864	3	1.79	1.78	1.14	1.14	0.71	70.74	23.85	94.59
9	43	2876	3	1.88	1.87	0.78	0.80	0.59	69.36	28.48	97.84
9	90	2808	3	1.41	1.42	1.11	1.10	0.63	64.26	28.95	93.21
9	94	2861	3	1.82	1.81	0.91	0.92	0.62	65.98	30.84	96.82
9	98	2813	3	1.91	1.88	1.13	1.14	0.69	71.28	24.48	95.76
9	100	2802	3	1.39	1.41	0.93	0.93	0.56	55.76	39.59	95.35
9	103	2850	2	0.93	0.91	0.71	0.73	0.50	61.54	35.48	97.02
9	112	2778	3	1.38	1.41	0.89	0.90	0.54	56.49	39.18	95.67
9	115	2745	3	1.33	1.33	0.90	0.89	0.59	70.09	28.04	98.13
9	116	2741	2	1.07	1.07	0.73	0.72	0.51	61.88	36.40	98.28
10	5	2764	4	2.67	2.68	1.21	1.20	0.69	66.97	28.39	95.36
10	11	2759	2	1.42	1.42	0.66	0.65	0.50	65.98	32.39	98.37
10	28	2766	3	1.66	1.67	0.96	0.96	0.64	61.14	35.99	97.13
10	29	2706	3	1.33	1.33	0.94	0.94	0.57	56.29	40.10	96.39
10	31	2712	3	1.02	1.01	0.96	0.94	0.55	54.25	40.30	94.55
10	34	2598	3	1.09	1.12	0.89	0.90	0.50	55.97	40.26	96.23
10	36	2700	2	0.95	0.94	0.58	0.57	0.51	75.68	23.35	99.03
10	44	2647	3	1.85	1.84	1.12	1.12	0.66	71.98	22.65	94.63
10	47	2513	3	1.95	1.97	1.06	1.04	0.60	73.90	22.70	96.60
10	51	2420	3	1.16	1.14	1.07	1.07	0.51	63.56	26.54	90.10
10	96	2802	3	1.39	1.41	0.93	0.93	0.56	55.76	39.59	95.35
10	101	2850	2	0.93	0.91	0.71	0.73	0.50	61.54	35.48	97.02
10	108	2670	3	1.55	1.57	1.06	1.06	0.60	57.26	36.92	94.18
10	112	2778	3	1.38	1.41	0.89	0.90	0.54	56.49	39.18	95.67

**Table 13. Rater Reliability Statistics – Writing**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
3	1A	3052	1	0.78	0.78	0.41	0.41	0.94	98.20	1.80	100.00
3	1B	3052	1	0.61	0.61	0.49	0.49	0.94	97.58	2.42	100.00
3	1C	3053	1	0.62	0.62	0.49	0.49	0.94	97.64	2.36	100.00
3	1D	3051	1	0.65	0.65	0.48	0.48	0.95	98.10	1.90	100.00
3	1E	3052	1	0.90	0.90	0.30	0.30	0.87	97.94	2.06	100.00
3	1F	3051	1	0.38	0.38	0.48	0.48	0.96	98.56	1.44	100.00
3	13A	3049	2	1.02	1.02	0.22	0.21	0.34	93.50	6.50	100.00
3	13B	3049	1	0.98	0.98	0.14	0.14	0.61	98.62	1.38	100.00
3	13C	3049	1	0.80	0.79	0.40	0.41	0.56	86.09	13.91	100.00
3	13D	3049	1	0.92	0.92	0.28	0.28	0.48	92.16	7.84	100.00
3	30A	3046	2	1.07	1.07	0.31	0.30	0.38	88.17	11.79	99.96
3	30B	3046	1	0.98	0.98	0.16	0.15	0.48	97.67	2.33	100.00
3	30C	3046	1	0.75	0.75	0.43	0.43	0.50	81.44	18.56	100.00
3	30D	3046	1	0.88	0.88	0.33	0.33	0.44	88.17	11.83	100.00
3	39A	3043	2	1.06	1.06	0.28	0.28	0.32	88.49	11.47	99.96
3	39B	3043	1	0.99	0.99	0.10	0.10	0.50	99.01	0.99	100.00
3	39C	3043	1	0.74	0.75	0.44	0.44	0.56	83.46	16.54	100.00
3	39D	3043	1	0.89	0.88	0.31	0.32	0.41	88.17	11.83	100.00
4	1	3089	1	0.98	0.99	0.12	0.12	0.83	99.48	0.52	100.00
4	2A	3074	1	0.60	0.60	0.49	0.49	0.96	98.76	1.24	100.00
4	2B	3074	1	0.61	0.61	0.49	0.49	0.94	97.69	2.31	100.00
4	2C	3073	1	0.77	0.77	0.42	0.42	0.94	98.28	1.72	100.00
4	2D	3074	1	0.72	0.73	0.45	0.44	0.81	92.84	7.16	100.00
4	2E	3074	1	0.95	0.95	0.22	0.22	0.90	99.41	0.59	100.00
4	2F	3073	1	0.90	0.90	0.30	0.30	0.91	98.80	1.20	100.00
4	3A	3079	4	2.48	2.47	0.98	0.97	0.63	52.13	42.12	94.25
4	3B	3078	4	2.62	2.59	0.83	0.82	0.58	55.23	41.42	96.65
4	3C	3078	2	1.88	1.87	0.33	0.34	0.40	86.71	13.26	99.97
4	23	2976	4	2.40	2.41	0.83	0.83	0.59	63.23	35.43	98.66
4	73	3053	4	2.56	2.55	0.72	0.72	0.62	68.12	31.32	99.44
4	94	3008	4	2.40	2.41	0.76	0.78	0.59	65.80	33.00	98.80
5	1	3009	1	0.98	0.99	0.12	0.12	0.75	99.27	0.73	100.00
5	2A	3001	1	0.79	0.78	0.41	0.41	0.90	96.77	3.23	100.00
5	2B	3001	1	0.90	0.90	0.31	0.30	0.94	99.10	0.90	100.00
5	2C	3001	1	0.94	0.94	0.23	0.23	0.91	99.27	0.73	100.00
5	2D	3001	1	0.88	0.89	0.32	0.32	0.89	98.03	1.97	100.00
5	2E	3001	1	0.44	0.44	0.50	0.50	0.95	97.77	2.23	100.00
5	2F	3001	1	0.68	0.68	0.47	0.47	0.97	98.73	1.27	100.00
5	3A	2998	4	2.48	2.47	0.86	0.87	0.62	59.13	36.94	96.07
5	3B	2999	4	2.52	2.52	0.78	0.77	0.55	57.34	39.09	96.43
5	3C	2999	2	1.88	1.88	0.34	0.33	0.41	87.19	12.68	99.87
5	64	2979	4	2.81	2.79	0.69	0.70	0.59	67.43	31.80	99.23
5	94	2976	4	2.40	2.41	0.83	0.83	0.59	63.23	35.43	98.66
5	116	2979	4	2.65	2.63	0.77	0.75	0.65	67.01	32.31	99.32

**Table 13. Rater Reliability Statistics – Writing (Continued)**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
6	1	2914	1	0.99	0.99	0.11	0.12	0.85	99.59	0.41	100.00
6	2A	2897	1	0.72	0.72	0.45	0.45	0.93	97.58	2.42	100.00
6	2B	2898	1	0.60	0.60	0.49	0.49	0.96	98.72	1.28	100.00
6	2C	2898	1	0.76	0.76	0.43	0.43	0.94	98.31	1.69	100.00
6	2D	2897	1	0.72	0.71	0.45	0.45	0.95	98.45	1.55	100.00
6	2E	2898	1	0.41	0.41	0.49	0.49	0.94	97.76	2.24	100.00
6	2F	2897	1	0.83	0.83	0.37	0.37	0.93	98.62	1.38	100.00
6	3A	2900	4	2.58	2.58	0.72	0.69	0.58	63.62	35.21	98.83
6	3B	2900	4	2.53	2.53	0.71	0.69	0.54	61.48	36.97	98.45
6	3C	2900	2	1.90	1.91	0.31	0.29	0.46	90.31	9.66	99.97
6	27	2769	4	2.59	2.57	0.71	0.74	0.54	64.94	34.15	99.09
6	77	2874	4	2.76	2.74	0.73	0.74	0.61	65.76	33.37	99.13
6	92	2979	4	2.65	2.63	0.77	0.75	0.65	67.01	32.31	99.32
7	1	2937	1	0.99	0.99	0.11	0.11	0.90	99.76	0.24	100.00
7	2A	2923	1	0.92	0.91	0.28	0.28	0.90	98.80	1.20	100.00
7	2B	2923	1	0.87	0.87	0.33	0.33	0.82	96.41	3.59	100.00
7	2C	2923	1	0.43	0.43	0.49	0.49	0.92	96.54	3.46	100.00
7	2D	2923	1	0.20	0.20	0.40	0.40	0.90	97.33	2.67	100.00
7	2E	2923	1	0.91	0.91	0.28	0.28	0.82	97.37	2.63	100.00
7	2F	2923	1	0.44	0.44	0.50	0.50	0.94	97.43	2.57	100.00
7	3A	2923	4	2.78	2.77	0.75	0.76	0.55	58.95	38.59	97.54
7	3B	2923	4	2.74	2.72	0.74	0.73	0.54	58.84	38.83	97.67
7	3C	2923	2	1.92	1.92	0.28	0.27	0.43	91.31	8.62	99.93
7	47	2909	4	2.69	2.68	0.69	0.70	0.64	70.61	29.25	99.86
7	68	2898	4	2.49	2.49	0.64	0.64	0.61	74.47	25.29	99.76
7	89	2769	4	2.59	2.57	0.71	0.74	0.54	64.94	34.15	99.09
8	1	2901	1	0.99	0.98	0.12	0.12	0.97	99.90	0.10	100.00
8	2A	2881	1	0.79	0.79	0.41	0.41	0.86	95.73	4.27	100.00
8	2B	2881	1	0.82	0.82	0.38	0.39	0.89	97.33	2.67	100.00
8	2C	2881	1	0.72	0.72	0.45	0.45	0.96	99.20	0.80	100.00
8	2D	2880	1	0.76	0.76	0.43	0.43	0.91	97.39	2.61	100.00
8	2E	2880	1	0.66	0.65	0.48	0.48	0.92	97.22	2.78	100.00
8	2F	2881	1	0.61	0.61	0.49	0.49	0.92	96.70	3.30	100.00
8	3A	2880	4	2.93	2.93	0.83	0.82	0.62	60.97	36.57	97.54
8	3B	2880	4	2.94	2.93	0.80	0.79	0.61	59.30	39.14	98.44
8	3C	2880	2	1.95	1.94	0.23	0.24	0.43	93.53	6.43	99.96
8	21	2840	4	2.67	2.67	0.69	0.68	0.59	70.20	29.66	99.86
8	74	2898	4	2.49	2.49	0.64	0.64	0.61	74.47	25.29	99.76
8	92	2816	4	2.46	2.45	0.65	0.68	0.58	73.38	26.37	99.75

**Table 13. Rater Reliability Statistics – Writing (Concluded)**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
9	1	3031	1	0.97	0.97	0.16	0.16	0.94	99.67	0.33	100.00
9	2A	2976	1	0.81	0.82	0.39	0.39	0.80	95.29	4.71	100.00
9	2B	2975	1	0.62	0.62	0.49	0.48	0.91	97.51	2.49	100.00
9	2C	2975	1	0.52	0.52	0.50	0.50	0.87	95.12	4.88	100.00
9	2D	2975	1	0.23	0.24	0.42	0.43	0.86	96.53	3.47	100.00
9	2E	2975	1	0.66	0.67	0.47	0.47	0.93	98.52	1.48	100.00
9	2F	2975	1	0.54	0.54	0.50	0.50	0.92	97.71	2.29	100.00
9	3A	2975	4	2.89	2.87	0.87	0.88	0.62	59.91	37.91	97.82
9	3B	2975	4	2.82	2.80	0.85	0.85	0.60	58.16	39.52	97.68
9	3C	2977	2	1.93	1.93	0.26	0.27	0.44	92.27	7.67	99.94
9	25	2840	4	2.67	2.67	0.69	0.68	0.59	70.20	29.66	99.86
9	68	2933	4	2.59	2.57	0.68	0.70	0.57	70.06	29.63	99.69
9	88	2745	4	2.64	2.63	0.74	0.75	0.55	67.53	31.85	99.38
10	1	2907	1	0.96	0.96	0.21	0.21	0.94	99.52	0.48	100.00
10	2A	2821	1	0.89	0.89	0.31	0.31	0.82	98.69	1.31	100.00
10	2B	2822	1	0.77	0.76	0.42	0.42	0.83	96.07	3.93	100.00
10	2C	2824	1	0.48	0.49	0.50	0.50	0.91	98.34	1.66	100.00
10	2D	2824	1	0.83	0.82	0.38	0.38	0.86	98.12	1.88	100.00
10	2E	2822	1	0.16	0.17	0.37	0.37	0.80	96.80	3.20	100.00
10	2F	2824	1	0.85	0.85	0.36	0.36	0.86	98.58	1.42	100.00
10	3A	2814	4	2.75	2.77	0.90	0.89	0.57	57.10	39.27	96.37
10	3B	2814	4	2.78	2.79	0.85	0.84	0.55	57.71	39.02	96.73
10	3C	2814	2	1.93	1.93	0.27	0.27	0.43	91.71	8.08	99.79
10	72	2770	4	2.56	2.55	0.75	0.75	0.57	68.89	30.56	99.45
10	95	2713	4	2.49	2.48	0.73	0.74	0.56	77.47	22.27	99.74
10	116	2745	4	2.64	2.63	0.74	0.75	0.55	67.53	31.85	99.38

**Table 14. Rater Reliability Statistics – Science**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
5	8	2962	2.00	0.30	0.29	0.66	0.66	0.87	95.23	4.09	99.32
5	21	2987	1.00	0.74	0.73	0.44	0.44	0.72	89.35	10.65	100.00
5	22	2980	1.00	0.41	0.40	0.49	0.49	0.85	93.32	6.68	100.00
5	23	2976	2.00	1.11	1.09	0.74	0.74	0.86	88.77	10.86	99.63
5	24	2981	2.00	1.22	1.22	0.75	0.75	0.90	91.65	8.25	99.90
5	25	2979	1.00	0.65	0.65	0.48	0.48	0.76	89.62	10.38	100.00
5	29	2981	2.00	0.69	0.70	0.82	0.82	0.66	71.25	23.45	94.70
5	34	2968	2.00	0.84	0.84	0.78	0.78	0.82	82.14	17.59	99.73
5	37	2977	2.00	0.65	0.65	0.78	0.78	0.86	86.23	13.34	99.57
5	42	2981	1.00	0.51	0.51	0.50	0.50	0.88	94.83	5.17	100.00
5	46	2986	2.00	1.20	1.20	0.76	0.76	0.87	88.07	11.63	99.70
5	49	2970	2.00	0.76	0.75	0.58	0.57	0.70	82.72	17.18	99.90
5	55	2983	2.00	1.53	1.52	0.62	0.62	0.77	85.58	13.71	99.29
5	58	2984	1.00	0.51	0.51	0.50	0.50	0.58	79.42	20.58	100.00
5	62	2981	2.00	1.15	1.12	0.58	0.57	0.66	79.00	20.93	99.93
5	66	2968	2.00	0.70	0.72	0.68	0.68	0.79	87.46	11.29	98.75
5	71	2974	2.00	0.93	0.95	0.68	0.67	0.74	79.50	20.26	99.76
5	75	2970	2.00	1.50	1.50	0.67	0.66	0.90	94.57	5.39	99.96
8	4	2863	1.00	0.32	0.31	0.47	0.46	0.75	90.08	9.92	100.00
8	11	2852	1.00	0.34	0.35	0.47	0.48	0.70	87.88	12.12	100.00
8	14	2874	1.00	0.56	0.57	0.50	0.50	0.83	92.86	7.14	100.00
8	20	2877	1.00	0.47	0.46	0.50	0.50	0.69	85.08	14.92	100.00
8	21	2879	1.00	0.65	0.64	0.48	0.48	0.47	76.00	24.00	100.00
8	22	2860	2.00	1.15	1.16	0.82	0.81	0.83	85.61	13.41	99.02
8	23	2859	1.00	0.66	0.66	0.47	0.47	0.57	81.49	18.51	100.00
8	24	2862	4.00	2.01	2.03	1.48	1.48	0.79	64.14	26.70	90.84
8	25	2832	2.00	1.26	1.25	0.81	0.81	0.77	80.95	17.84	98.79
8	26	2875	2.00	1.37	1.37	0.77	0.77	0.89	91.58	8.21	99.79
8	33	2852	2.00	0.54	0.54	0.54	0.55	0.76	91.37	8.56	99.93
8	37	2869	3.00	1.93	1.95	1.01	1.00	0.83	80.82	18.69	99.51
8	43	2813	2.00	0.49	0.50	0.57	0.57	0.61	79.20	20.69	99.89
8	47	2872	1.00	0.08	0.08	0.27	0.28	0.80	98.12	1.88	100.00
8	50	2840	2.00	0.81	0.82	0.68	0.68	0.74	83.72	15.86	99.58
8	58	2639	1.00	0.20	0.20	0.40	0.40	0.75	99.08	0.92	100.00
8	63	2836	2.00	0.56	0.56	0.75	0.75	0.73	82.46	15.38	97.84
8	66	2815	1.00	0.45	0.46	0.50	0.50	0.78	91.56	8.44	100.00
8	70	2877	2.00	0.84	0.83	0.79	0.79	0.82	84.81	14.43	99.24
8	71	2787	2.00	0.65	0.64	0.74	0.74	0.70	79.27	20.04	99.31
8	73	2714	2.00	0.51	0.52	0.60	0.60	0.68	92.23	7.58	99.81
8	77	2856	2.00	1.14	1.13	0.77	0.77	0.80	83.77	15.74	99.51
8	82	2783	2.00	0.73	0.73	0.65	0.64	0.69	83.72	16.13	99.85

**Table 14. Rater Reliability Statistics – Science (Concluded)**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
10	6	2777	2.00	0.64	0.65	0.72	0.73	0.67	76.30	22.80	99.10
10	21	2768	4.00	2.13	2.12	1.37	1.37	0.77	75.40	20.51	95.91
10	22	2729	2.00	0.89	0.88	0.86	0.86	0.82	92.21	7.50	99.71
10	23	2719	1.00	0.51	0.51	0.50	0.50	0.79	94.02	5.98	100.00
10	24	2689	3.00	2.01	2.00	1.04	1.04	0.65	71.64	24.65	96.29
10	25	2728	1.00	0.33	0.34	0.47	0.47	0.60	84.52	15.48	100.00
10	26	2701	1.00	0.52	0.52	0.50	0.50	0.57	81.28	18.72	100.00
10	27	2701	1.00	0.46	0.45	0.50	0.50	0.67	87.46	12.54	100.00
10	29	2769	1.00	0.65	0.64	0.48	0.48	0.67	87.03	12.97	100.00
10	34	2722	2.00	0.09	0.09	0.29	0.29	0.43	97.37	2.59	99.96
10	36	2726	2.00	1.23	1.26	0.75	0.76	0.69	80.04	19.07	99.11
10	38	2711	1.00	0.40	0.41	0.49	0.49	0.74	91.84	8.16	100.00
10	41	2660	2.00	0.29	0.29	0.48	0.48	0.54	86.02	13.75	99.77
10	44	2730	2.00	1.04	1.03	0.90	0.90	0.76	82.53	15.16	97.69
10	50	2702	2.00	0.47	0.48	0.75	0.75	0.73	89.31	9.54	98.85
10	53	2641	2.00	0.24	0.25	0.50	0.50	0.43	79.76	19.04	98.80
10	61	2662	2.00	0.56	0.58	0.68	0.68	0.67	86.58	13.12	99.70
10	65	2739	2.00	1.62	1.60	0.65	0.67	0.65	84.31	14.41	98.72
10	68	2745	2.00	0.78	0.79	0.77	0.77	0.78	88.31	11.43	99.74
10	73	2708	1.00	0.48	0.47	0.50	0.50	0.72	90.51	9.49	100.00
10	77	2750	2.00	1.16	1.16	0.80	0.80	0.85	97.31	2.58	99.89
10	81	2726	1.00	0.19	0.20	0.39	0.40	0.69	93.74	6.26	100.00
10	83	2730	1.00	0.56	0.55	0.50	0.50	0.70	88.70	11.30	100.00

**Table 15. Rater Reliability Statistics – Spanish Reading**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
3	1	236	3	1.66	1.65	1.27	1.27	0.96	96.61	3.39	100.00
3	2	238	3	1.84	1.86	1.32	1.32	0.97	97.05	2.53	99.58
3	8	235	2	1.17	1.17	0.82	0.82	0.88	89.36	10.64	100.00
3	17	229	3	1.96	1.94	0.97	0.96	0.74	73.36	26.20	99.56
3	25	235	2	1.43	1.40	0.71	0.71	0.77	84.26	14.47	98.73
3	26	237	2	0.67	0.72	0.77	0.79	0.83	86.86	11.86	98.72
3	32	236	3	1.15	1.15	0.97	0.97	0.93	96.61	3.39	100.00
3	36	236	2	1.15	1.20	0.79	0.80	0.86	86.02	13.98	100.00
4	13	22	3	1.27	1.41	0.98	0.96	0.83	81.82	13.64	95.46
4	14	22	2	0.73	0.59	0.55	0.50	0.42	68.18	31.82	100.00
4	29	22	3	2.05	2.14	1.17	1.21	0.97	90.91	9.09	100.00
4	31	22	2	0.68	0.68	0.84	0.84	0.86	81.82	18.18	100.00
4	33	21	3	1.10	1.05	1.00	0.92	0.62	61.90	33.33	95.23
4	34	20	3	1.55	1.55	1.23	1.23	0.72	70.00	30.00	100.00
4	42	22	2	0.86	0.82	0.89	0.85	0.91	86.36	13.64	100.00
4	44	21	2	1.05	1.19	0.92	0.87	0.82	85.71	14.29	100.00
4	45	21	3	1.33	1.14	0.97	1.06	0.71	61.90	38.10	100.00
4	97	22	2	1.00	1.14	0.82	0.56	0.48	50.00	50.00	100.00
4	98	21	3	0.86	0.90	0.65	0.70	0.55	66.67	33.33	100.00
4	100	21	2	0.95	0.81	0.74	0.68	0.75	85.71	14.29	100.00
4	108	22	2	1.45	1.55	0.80	0.80	0.93	90.91	9.09	100.00
4	116	21	3	1.76	1.81	1.00	0.93	0.81	95.24	4.76	100.00



**Table 16. Rater Reliability Statistics – Spanish Writing**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
3	4A	237	1	0.76	0.76	0.43	0.43	0.93	97.89	2.11	100.00
3	4B	237	1	0.26	0.23	0.44	0.42	0.81	93.25	6.75	100.00
3	4C	237	1	0.61	0.60	0.49	0.49	0.94	97.47	2.53	100.00
3	4D	237	1	0.57	0.57	0.50	0.50	0.95	97.89	2.11	100.00
3	4E	237	1	0.51	0.52	0.50	0.50	0.87	93.67	6.33	100.00
3	4F	237	1	0.71	0.75	0.45	0.43	0.83	93.67	6.33	100.00
3	16A	238	2	1.16	1.10	0.67	0.65	0.62	71.85	26.47	98.32
3	16B	238	1	0.71	0.72	0.45	0.45	0.44	77.31	22.69	100.00
3	16C	238	1	0.70	0.68	0.46	0.47	0.54	80.25	19.75	100.00
3	16D	238	1	0.83	0.82	0.38	0.39	0.65	89.92	10.08	100.00
3	27A	238	2	1.16	1.15	0.71	0.76	0.73	74.79	23.95	98.74
3	27B	238	1	0.70	0.67	0.46	0.47	0.65	84.87	15.13	100.00
3	27C	238	1	0.72	0.66	0.45	0.47	0.74	88.66	11.34	100.00
3	27D	238	1	0.81	0.78	0.39	0.42	0.79	93.28	6.72	100.00
3	39A	237	2	1.26	1.26	0.69	0.69	0.62	66.24	32.91	99.15
3	39B	237	1	0.72	0.72	0.45	0.45	0.49	79.32	20.68	100.00
3	39C	237	1	0.68	0.65	0.47	0.48	0.77	90.30	9.70	100.00
3	39D	237	1	0.87	0.87	0.34	0.34	0.77	94.94	5.06	100.00
4	1	22	1	0.95	0.91	0.21	0.29	0.65	95.45	4.55	100.00
4	2A	22	1	0.91	0.86	0.29	0.35	0.78	95.45	4.55	100.00
4	2B	22	1	0.73	0.64	0.46	0.49	0.79	90.91	9.09	100.00
4	2C	22	1	0.73	0.73	0.46	0.46	1.00	100.00	0.00	100.00
4	2D	22	1	0.68	0.73	0.48	0.46	0.89	95.45	4.55	100.00
4	2E	22	1	0.41	0.50	0.50	0.51	0.64	81.82	18.18	100.00
4	2F	22	1	0.18	0.18	0.39	0.39	1.00	100.00	0.00	100.00
4	3A	22	4	1.86	1.77	1.13	1.11	0.96	90.91	9.09	100.00
4	3B	22	4	1.95	2.14	0.72	0.64	0.80	81.82	18.18	100.00
4	3C	22	2	1.55	1.73	0.51	0.55	0.36	63.64	36.36	100.00
4	25	22	4	1.68	1.82	1.21	1.33	0.78	45.45	50.00	95.45
4	63	22	4	1.73	1.77	0.98	0.92	0.82	68.18	31.82	100.00
4	90	22	4	2.27	2.23	1.03	0.92	0.78	59.09	40.91	100.00

**Table 17. Rater Severity/Leniency Study Results**

Content Area	Grade	2008 Item Number	2010 Item Number	Valid N	Mean 2008	Mean 2010	Mean Difference	STD 2008	STD 2010	% Adjacent	% Exact	% Discrepant	Corr	Intra Class Corr	Wtd Kappa
Mathematics	3	33	33	1000	1.59	1.58	0.01	0.62	0.63	2.60	97.40	0.00	0.97	0.98	0.97
Mathematics	3	20	20	1001	1.50	1.54	-0.04	1.01	1.01	8.69	90.91	0.40	0.95	0.97	0.95
Mathematics	4	46	46	996	2.70	2.69	0.01	1.22	1.25	18.47	80.72	0.80	0.93	0.96	0.93
Mathematics	4	55	55	1000	2.12	2.10	0.02	0.92	0.90	11.10	88.50	0.40	0.92	0.96	0.92
Mathematics	4	5	5	992	1.40	1.40	0.00	0.78	0.78	2.62	97.18	0.20	0.97	0.99	0.97
Mathematics	5	14	10	993	2.06	1.94	0.12	0.84	0.86	25.88	72.00	2.11	0.77	0.88	0.76
Mathematics	5	57	60	995	1.30	1.28	0.02	0.78	0.76	16.28	83.62	0.10	0.86	0.93	0.86
Mathematics	5	23	23	1001	3.14	3.09	0.05	1.05	1.10	15.58	83.72	0.70	0.92	0.96	0.92
Mathematics	6	4	4	998	1.73	1.71	0.02	0.48	0.53	2.51	96.89	0.60	0.91	0.95	0.90
Mathematics	6	16	16	979	1.52	1.57	-0.05	1.26	1.26	14.71	84.78	0.51	0.95	0.97	0.95
Mathematics	6	20	20	1000	1.96	2.00	-0.04	1.10	1.09	17.60	82.10	0.30	0.92	0.96	0.92
Mathematics	7	48	49	994	0.83	0.84	-0.01	0.94	0.95	11.47	88.13	0.40	0.93	0.96	0.93
Mathematics	7	20	20	980	1.33	1.26	0.07	1.25	1.24	18.78	79.80	1.43	0.92	0.96	0.92
Mathematics	7	33	33	997	1.28	1.19	0.09	0.63	0.62	13.24	86.76	0.00	0.84	0.92	0.83
Mathematics	8	40	40	992	2.48	2.38	0.10	0.93	0.93	20.06	79.23	0.71	0.87	0.93	0.87
Mathematics	8	7	17	963	0.55	0.54	0.01	0.85	0.85	5.09	93.56	1.35	0.93	0.96	0.93
Mathematics	8	46	48	987	1.87	1.87	0.00	0.95	0.96	4.56	95.04	0.41	0.96	0.98	0.96
Mathematics	9	26	26	984	1.02	0.94	0.08	0.88	0.89	17.28	82.11	0.61	0.87	0.94	0.87
Mathematics	9	60	60	976	1.57	1.47	0.10	1.06	1.11	29.51	65.47	5.02	0.79	0.89	0.79
Mathematics	9	12	11	993	1.04	1.16	-0.12	0.76	0.84	30.11	68.88	1.01	0.75	0.87	0.74
Mathematics	10	4	4	977	1.59	1.57	0.02	0.73	0.74	7.98	90.69	1.33	0.88	0.94	0.88
Mathematics	10	20	20	973	0.84	0.81	0.03	1.35	1.33	11.20	87.98	0.82	0.96	0.98	0.96
Mathematics	10	28	28	960	1.09	1.23	-0.14	0.74	0.78	14.90	84.79	0.31	0.88	0.93	0.86

**Table 17. Rater Severity/Leniency Study Results (Continued)**

Content Area	Grade	2008 Item Number	2010 Item Number	Valid N	Mean 2008	Mean 2010	Mean Difference	STD 2008	STD 2010	% Adjacent	% Exact	% Discrepant	Corr	Intra Class Corr	Wtd Kappa
Reading	3	35	35	980	1.96	1.99	-0.03	1.11	1.10	19.08	79.90	1.02	0.91	0.95	0.91
Reading	3	1	1	994	1.47	1.38	0.09	1.08	1.00	32.19	59.46	8.35	0.69	0.84	0.69
Reading	4	104	103	997	2.54	2.46	0.08	0.81	0.87	16.75	81.85	1.40	0.85	0.92	0.84
Reading	4	25	24	992	1.45	1.52	-0.07	1.12	0.95	36.79	58.77	4.44	0.75	0.87	0.74
Reading	5	11	11	996	1.52	1.78	-0.26	1.16	1.12	24.90	70.48	4.62	0.86	0.92	0.83
Reading	6	94	94	978	1.11	1.11	0.00	0.85	0.85	9.71	89.98	0.31	0.92	0.96	0.92
Reading	6	106	106	978	1.41	1.56	-0.15	1.12	1.16	42.54	47.96	9.51	0.68	0.84	0.67
Reading	7	12	12	980	1.18	1.01	0.17	0.69	0.68	30.71	68.37	0.92	0.66	0.82	0.64
Reading	7	99	99	977	1.61	1.73	-0.12	1.12	1.10	36.85	55.17	7.98	0.71	0.85	0.71
Reading	8	108	109	969	2.31	2.14	0.17	0.98	1.02	22.91	74.30	2.79	0.83	0.91	0.82
Reading	9	102	103	948	0.88	0.99	-0.11	0.69	0.71	35.23	62.45	2.32	0.56	0.77	0.55
Reading	10	5	5	973	2.64	2.80	-0.16	1.14	1.17	38.95	49.64	11.41	0.68	0.83	0.67
Writing	3	30A	30A	986	1.10	1.17	-0.07	0.37	0.40	17.44	82.45	0.10	0.41	0.70	0.40
Writing	3	30B	30B	986	0.97	0.99	-0.02	0.17	0.11	2.64	97.36	0.00	0.41	0.68	0.37
Writing	3	30C	30C	986	0.81	0.80	0.01	0.40	0.40	14.60	85.40	0.00	0.53	0.77	0.53
Writing	3	30D	30D	986	0.81	0.86	-0.05	0.40	0.35	14.81	85.19	0.00	0.48	0.74	0.47
Writing	5	94	94	981	2.30	2.53	-0.23	0.73	0.73	34.05	65.04	0.92	0.70	0.83	0.66
Writing	7	68	68	987	2.38	2.40	-0.02	0.69	0.63	22.19	77.20	0.61	0.72	0.86	0.72
Writing	8	73	74	994	2.51	2.60	-0.09	0.67	0.67	31.39	68.31	0.30	0.64	0.82	0.64
Writing	9	69	68	978	2.46	2.46	0.00	0.69	0.69	32.31	67.28	0.41	0.64	0.82	0.64
Writing	10	74	72	985	2.49	2.32	0.17	0.69	0.64	32.49	66.90	0.61	0.63	0.80	0.61

**Table 17. Rater Severity/Leniency Study Results (Concluded)**

Content Area	Grade	2008 Item Number	2010 Item Number	Valid N	Mean 2008	Mean 2010	Mean Difference	STD 2008	STD 2010	% Adjacent	% Exact	% Discrepant	Corr	Intra Class Corr	Wtd Kappa
Science	5	25	25	976	0.56	0.70	-0.14	0.50	0.46	17.52	82.48	0.00	0.66	0.81	0.63
Science	5	55	37	995	0.58	0.56	0.02	0.75	0.74	14.37	85.03	0.60	0.85	0.92	0.85
Science	8	47	43	924	0.57	0.52	0.05	0.56	0.56	30.19	69.59	0.22	0.51	0.75	0.51
Science	8	24	24	970	2.37	2.27	0.10	1.43	1.45	28.35	64.43	7.22	0.85	0.93	0.85
Science	8	57	58	852	0.39	0.38	0.01	0.49	0.49	1.29	98.71	0.00	0.97	0.99	0.97
Science	10	41	29	916	0.63	0.61	0.02	0.48	0.49	12.55	87.45	0.00	0.73	0.87	0.73
Science	10	21	21	931	2.12	1.97	0.15	1.29	1.29	25.24	71.11	3.65	0.88	0.94	0.88
Science	10	24	24	849	2.21	2.00	0.21	0.97	1.02	27.33	70.08	2.59	0.83	0.90	0.81
Science	10	78	68	910	0.75	0.75	0.00	0.76	0.76	11.32	88.46	0.22	0.89	0.95	0.89

**Table 18. Tested Population Demographic Distribution – Mathematics**

Subgroup	Grade							
	3	4	5	6	7	8	9	10
	N	N	N	N	N	N	N	N
<b>No Disability</b>	56561	55510	53886	53244	52483	52277	54148	51154
<b>Disability</b>	5483	5745	5976	5657	5351	4913	4990	4255
<b>No IEP</b>	56565	55510	53891	53243	52474	52277	54132	51151
<b>IEP</b>	5478	5741	5968	5654	5352	4908	4990	4253
<b>No Accommodation</b>	50949	50595	50131	51296	51214	51094	55259	52275
<b>Accommodation</b>	11044	10632	9702	7527	6556	6018	3782	3064
<b>Am. Indian/AK Nat</b>	716	696	684	712	690	709	694	685
<b>Asian/Pac. Isl.</b>	2439	2364	2248	2266	2239	2108	2248	2026
<b>Black</b>	3618	3708	3648	3629	3319	3431	3609	3334
<b>Hispanic</b>	18834	18599	17802	16975	16247	15679	15908	14255
<b>White</b>	36437	35891	35481	35321	35340	35262	36682	35117
<b>Free Lunch Elig.</b>	21703	21133	20106	19037	17755	16995	16048	13626
<b>Reduced Lunch Elig.</b>	5059	5243	5045	4933	4658	4544	4327	3619
<b>Not FRL Elig.</b>	35264	34857	34698	34908	35398	35630	38739	38160
<b>Female</b>	30553	30014	29327	28999	28297	28014	28741	27162
<b>Male</b>	31488	31244	30534	29903	29538	29173	30401	28252
<b>Lang. Prof. NA</b>	49831	49644	49173	48672	48196	48180	50365	47650
<b>Lang. Prof. NEP</b>	2984	2156	1228	934	785	674	924	784
<b>Lang. Prof. LEP</b>	7844	7066	5955	5102	4203	3553	3031	2345
<b>Lang. Prof. FEP</b>	1385	2391	3505	4195	4651	4782	4811	4628
<b>Not Mig. or Immig.</b>	60973	60352	59070	58124	57063	56415	58300	54652
<b>Mig. or Immig.</b>	1068	899	788	772	763	769	819	752

**Table 19. Tested Population Demographic Distribution – Reading**

Subgroup	Grade							
	3	4	5	6	7	8	9	10
	N	N	N	N	N	N	N	N
No Disability	55515	55377	53834	53170	52425	52226	54072	50992
Disability	5368	5704	5954	5644	5340	4903	4978	4234
No IEP	55512	55378	53835	53166	52419	52223	54058	50990
IEP	5367	5702	5952	5643	5338	4901	4977	4231
No Accommodation	50567	49473	49736	50134	51354	51240	55644	52119
Accommodation	10275	11593	10046	8593	6340	5815	3311	3001
Am. Indian/AK	716	688	681	710	688	712	693	679
Asian/Pac. Isl.	2437	2355	2235	2263	2237	2102	2242	2028
Black	3600	3703	3654	3617	3319	3424	3606	3322
Hispanic	17630	18484	17784	16938	16224	15647	15885	14188
White	36500	35856	35435	35288	35297	35244	36626	35018
Free Lunch Elig.	20636	21021	20077	18983	17727	16950	16015	13525
Reduced Lunch Elig.	4969	5234	5027	4925	4650	4547	4313	3610
Not FRL Elig.	35239	34805	34670	34884	35365	35611	38698	38082
Female	30013	29938	29296	28954	28278	27991	28712	27114
Male	30869	31149	30494	29859	29486	29133	30341	28120
Lang. Prof. NA	49919	49604	49124	48611	48149	48137	50285	47506
Lang. Prof. NEP	2237	2036	1208	928	776	665	919	772
Lang. Prof. LEP	7342	7054	5949	5081	4193	3543	3028	2329
Lang. Prof. FEP	1383	2388	3507	4195	4647	4782	4813	4619
Not Mig. or Immig.	59908	60244	58999	58038	57000	56370	58223	54468
Mig. or Immig.	972	832	785	770	754	753	811	752

**Table 20. Tested Population Demographic Distribution – Writing**

Subgroup	Grade							
	3	4	5	6	7	8	9	10
	N	N	N	N	N	N	N	N
<b>No Disability</b>	55392	55369	53780	53202	52438	52195	54102	50957
<b>Disability</b>	5378	5721	5944	5652	5334	4907	4990	4257
<b>No IEP</b>	55393	55370	53781	53198	52432	52192	54087	50955
<b>IEP</b>	5375	5719	5942	5651	5332	4905	4989	4254
<b>No Accommodation</b>	49913	48799	48801	50032	50734	50982	55159	51882
<b>Accommodation</b>	10803	12263	10910	8730	6961	6042	3768	3165
<b>Am. Indian/AK</b>	715	688	680	712	687	714	692	682
<b>Asian/Pac. Isl.</b>	2438	2355	2234	2263	2236	2094	2247	2021
<b>Black</b>	3616	3708	3650	3619	3320	3424	3608	3314
<b>Hispanic</b>	17614	18483	17767	16970	16232	15668	15900	14184
<b>White</b>	36387	35861	35394	35292	35297	35202	36647	35022
<b>Free Lunch Elig.</b>	20663	21031	20064	19023	17726	16977	16035	13531
<b>Reduced Lunch Elig.</b>	4963	5232	5027	4923	4646	4545	4321	3618
<b>Not FRL Elig.</b>	35125	34806	34619	34886	35377	35559	38711	38056
<b>Female</b>	29946	29936	29267	28974	28281	27996	28734	27098
<b>Male</b>	30824	31159	30459	29879	29490	29101	30361	28124
<b>Lang. Prof. NA</b>	49797	49609	49070	48628	48151	48094	50324	47502
<b>Lang. Prof. NEP</b>	2268	2043	1209	927	775	670	925	773
<b>Lang. Prof. LEP</b>	7326	7055	5941	5103	4197	3553	3025	2328
<b>Lang. Prof. FEP</b>	1379	2384	3504	4197	4649	4783	4813	4611
<b>Not Mig. or Immig.</b>	59816	60251	58935	58073	57002	56339	58263	54459
<b>Mig. or Immig.</b>	950	834	785	775	759	757	812	749

**Table 21. Tested Population Demographic Distribution – Science**

Subgroup	Grade		
	5	8	10
	N	N	N
No Disability	54065	52551	51269
Disability	5977	4926	4282
No IEP	54073	52547	51267
IEP	5969	4925	4277
No Accommodation	51337	52465	52383
Accommodation	8669	4936	3043
Am. Indian/AK	686	716	687
Asian/Pac. Isl.	2246	2114	2035
Black	3647	3433	3343
Hispanic	17814	15676	14226
White	35650	35537	35265
Free Lunch Elig.	20113	17017	13588
Reduced Lunch Elig.	5048	4553	3618
Not FRL Elig.	34867	35884	38336
Female	29432	28166	27242
Male	30609	29307	28312
Lang. Prof. NA	49360	48488	47814
Lang. Prof. NEP	1224	665	782
Lang. Prof. LEP	5957	3549	2332
Lang. Prof. FEP	3502	4773	4619
Not Mig. or Immig.	59247	56711	54790
Mig. or Immig.	791	760	754



**Table 22. Tested Population Demographic Distribution – Spanish Reading and Writing**

Subgroup	Spanish Reading		Spanish writing	
	Grade		Grade	
	3	4	3	4
	N	N	N	N
No Disability	1120	112	1122	112
Disability	90	1	89	1
No IEP	1120	112	1122	112
IEP	90	1	89	1
No Accommodation	922	71	907	68
Accommodation	288	42	304	45
Am. Indian/AK	1	1	1	1
Asian/Pac. Isl.				
Black	3		3	
Hispanic	1186	107	1186	107
White	20	5	20	5
Free Lunch Elig.	1021	82	1021	82
Reduced Lunch Elig.	83	7	83	7
Not FRL Elig.	106	24	106	24
Female	574	56	579	56
Male	636	57	632	57
Lang. Prof. NA	11	1	10	1
Lang. Prof. NEP	695	99	700	99
Lang. Prof. LEP	499	13	496	13
Lang. Prof. FEP	5		5	
Not Mig. or Immig.	1093	57	1096	57
Mig. or Immig.	117	56	115	56

**Table 23. Multiple-Choice Item Analyses, English Grade 03 Reading**

Mean Item-Total Corr.: 0.44 Mean p-Value: 0.68

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
2	1	1	1	0.46	1.11	0.74	21	2	1	1	0.48	0.12	0.86
3	1	1	1	0.25	0.09	0.80	22	2	1	1	0.44	0.42	0.51
4	1	1	3	0.46	0.07	0.80	23	2	1	1	0.56	0.28	0.77
5	1	1	3	0.37	0.17	0.88	24	2	1	3	0.48	0.55	0.81
7	1	1	1	0.44	0.19	0.54	27	2	1	3	0.28	0.25	0.53
8	1	1	1	0.36	0.29	0.43	28	2	1	3	0.41	0.36	0.65
9	1	1	3	0.44	0.31	0.61	29	2	1	2	0.36	0.16	0.51
11	1	1	1	0.54	0.40	0.70	30	2	1	3	0.50	0.17	0.63
12	1	1	3	0.47	0.69	0.68	32	2	1	2	0.37	0.24	0.66
13	1	1	1	0.49	0.66	0.76	33	2	1	2	0.51	0.66	0.70
15	1	1	1	0.38	1.12	0.54	34	2	1	2	0.45	0.72	0.77
16	1	1	1	0.50	1.49	0.78	36	2	1	2	0.46	0.96	0.82
17	1	1	3	0.43	1.59	0.59	37	2	1	2	0.59	0.65	0.75
18	1	1	3	0.50	1.70	0.74	38	2	1	2	0.53	0.85	0.79
19	2	1	1	0.49	0.05	0.63	39	2	1	2	0.25	0.88	0.56
20	2	1	1	0.50	0.09	0.73	40	2	1	2	0.27	1.02	0.50

**Table 24. Constructed-Response Item Analyses, English Grade 03 Reading**

Mean Item-Total Corr.: 0.59 Mean p-Value: 0.46

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
1		1	1	1	0.59	31.99	28.94	22.76	15.64		0.67	0.40
6		1	1	1	0.52	16.22	41.00	42.07			0.71	0.63
10		1	1	1	0.56	27.18	60.41	10.62			1.79	0.41
14		1	1	1	0.60	48.11	19.50	29.86			2.53	0.40
25		2	1	2	0.59	28.34	25.75	31.42	13.91		0.57	0.43
26		2	1	2	0.62	40.29	4.71	18.03	36.03		0.94	0.50
31		2	1	2	0.50	49.71	40.59	7.65			2.05	0.28
35		2	1	2	0.70	16.94	15.32	23.27	43.15		1.32	0.64

**Table 25. Multiple-Choice Item Analyses, Spanish Grade 03 Reading**

Mean Item-Total Corr.: 0.39 Mean p-Value: 0.6

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
3	1	1	2	0.35	0.41	0.28	21	2	1	1	0.45	0.66	0.92
4	1	1	2	0.29	0.17	0.65	22	2	1	1	0.41	0.08	0.69
5	1	1	3	0.35	0.08	0.34	23	2	1	1	0.53	0.08	0.83
6	1	1	3	0.29	0.25	0.27	24	2	1	3	0.44	0.08	0.83
7	1	1	1	0.33	0.91	0.29	27	2	1	2	0.37	0.50	0.88
9	1	1	3	0.38	0.66	0.48	28	2	1	3	0.48	0.08	0.73
10	1	1	3	0.32	0.66	0.61	29	2	1	3	0.32	0.17	0.76
11	1	1	1	0.45	0.41	0.69	30	2	1	2	0.40	0.00	0.52
12	1	1	1	0.30	0.74	0.55	31	2	1	2	0.44	0.50	0.60
13	1	1	1	0.35	0.99	0.35	33	2	1	2	0.38	0.17	0.57
14	1	1	1	0.18	0.74	0.41	34	2	1	2	0.23	0.33	0.49
15	1	1	3	0.53	1.16	0.76	35	2	1	3	0.17	0.58	0.34
16	1	1	1	0.44	1.65	0.84	37	2	1	1	0.59	1.07	0.72
18	1	1	1	0.45	9.09	0.73	38	2	1	3	0.45	1.16	0.63
19	1	1	1	0.50	2.56	0.77	39	2	1	1	0.45	1.07	0.58
20	1	1	3	0.51	2.89	0.67	40	2	1	3	0.42	1.16	0.56

**Table 26. Constructed-Response Item Analyses, Spanish Grade 03 Reading**

Mean Item-Total Corr.: 0.59 Mean p-Value: 0.55

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
1		1	1	2	0.55	31.32	9.50	22.89	35.45		0.83	0.54
2		1	1	2	0.69	27.36	9.50	10.08	52.23		0.83	0.62
8		1	1	1	0.64	25.12	30.00	42.98			1.90	0.58
17		1	1	1	0.62	11.74	21.65	29.17	33.97		3.47	0.61
25		2	1	1	0.62	15.21	27.60	56.20			0.99	0.70
26		2	1	1	0.46	52.73	25.04	20.99			1.24	0.34
32		2	1	2	0.51	29.01	34.88	29.09	6.20		0.83	0.37
36		2	1	1	0.65	21.74	33.06	43.64			1.57	0.60

**Table 27. Multiple-Choice Item Analyses, English Grade 03 Writing**

Mean Item-Total Corr.: 0.42 Mean p-Value: 0.8

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
2	1	3	8	0.46	0.02	0.76	21	2	3	8	0.44	0.03	0.80
3	1	3	8	0.40	0.08	0.82	22	2	3	8	0.27	0.08	0.89
4	1	3	8	0.42	0.20	0.66	23	2	3	8	0.50	0.23	0.67
5	1	3	8	0.51	0.34	0.88	24	2	3	8	0.48	0.48	0.73
6	1	3	8	0.44	0.48	0.90	25	2	3	7	0.44	0.76	0.67
7	1	3	7	0.35	0.24	0.81	26	2	2	5	0.43	0.06	0.89
8	1	3	7	0.34	0.32	0.80	27	2	2	5	0.45	0.12	0.63
9	1	3	7	0.43	0.48	0.84	28	2	3	8	0.48	0.24	0.90
10	1	3	7	0.38	0.31	0.80	29	2	2		0.27	0.43	0.97
11	1	3	7	0.28	0.31	0.98	31	2	2	5	0.40	0.06	0.92
12	1	2		0.27	0.42	0.96	32	2	2	5	0.40	0.07	0.85
14	1	2		0.33	0.18	0.73	33	2	3	8	0.54	0.09	0.77
15	1	2		0.41	1.77	0.83	34	2	3	8	0.46	0.22	0.90
16	1	2		0.48	0.64	0.61	35	2	3	8	0.56	0.38	0.80
17	1	2		0.48	0.95	0.71	36	2	3	8	0.45	0.31	0.71
18	1	3	7	0.44	1.14	0.84	37	2	3	8	0.42	0.33	0.68
19	1	2	5	0.42	0.29	0.79	38	2	3	7	0.46	0.56	0.72
20	1	2	5	0.47	0.33	0.89							

**Table 28. Constructed-Response Item Analyses, English Grade 03 Writing**

Mean Item-Total Corr.: 0.4 Mean p-Value: 0.75

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
1	A	1	3	8	0.41	21.48	78.40				0.13	0.78
1	B	1	3	7	0.53	38.88	61.00				0.12	0.61
1	C	1	3	8	0.50	38.81	61.05				0.14	0.61
1	D	1	3	8	0.46	34.94	64.94				0.12	0.65
1	E	1	3	7	0.21	9.79	90.09				0.12	0.90
1	F	1	3	7	0.39	62.15	37.71				0.13	0.38
13	A	1	2	5	0.25	0.96	95.17	3.63			0.24	0.51
13	B	1	2	5	0.29	1.71	98.05				0.24	0.98
13	C	1	2	5	0.52	18.52	81.24				0.24	0.81
13	D	1	3	5	0.45	8.40	91.36				0.24	0.91
30	A	2	2	5	0.33	1.39	89.51	8.80			0.30	0.54
30	B	2	2	5	0.31	2.34	97.36				0.30	0.97
30	C	2	2	5	0.54	23.91	75.79				0.30	0.76
30	D	2	3	5	0.48	12.02	87.68				0.30	0.88
39	A	2	2	5	0.32	0.96	90.83	7.83			0.38	0.53
39	B	2	2	5	0.27	1.10	98.53				0.38	0.99
39	C	2	2	5	0.55	24.04	75.58				0.38	0.76
39	D	2	3	5	0.47	11.55	88.08				0.38	0.88

**Table 29. Multiple-Choice Item Analyses, Spanish Grade 03 Writing**

Mean Item-Total Corr.: 0.4 Mean p-Value: 0.71

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
1	1	3	7	0.42	0.00	0.86	21	2	3	8	0.35	0.41	0.72
2	1	3	7	0.41	0.00	0.85	22	2	3	8	0.45	0.00	0.59
3	1	3	7	0.44	0.00	0.89	23	2	3	8	0.40	0.17	0.75
5	1	3	7	0.38	0.00	0.62	24	2	3	8	0.34	0.00	0.68
6	1	3	7	0.38	0.08	0.81	25	2	3	8	0.43	0.33	0.80
7	1	3	7	0.32	0.08	0.71	26	2	3	8	0.37	0.17	0.43
8	1	3	7	0.38	0.74	0.54	28	2	3	7	0.44	0.08	0.68
9	1	3	7	0.43	1.32	0.51	29	2	3	7	0.48	0.08	0.88
10	1	3	7	0.36	0.08	0.93	30	2	3	7	0.43	0.41	0.84
11	1	3	7	0.40	0.17	0.85	31	2	3	7	0.51	0.33	0.72
12	1	3	7	0.45	0.41	0.91	32	2	3	7	0.42	0.66	0.61
13	1	2		0.39	0.17	0.74	33	2	2		0.45	0.83	0.65
14	1	2		0.41	0.50	0.79	34	2	2		0.40	0.00	0.92
15	1	2	7	0.49	0.41	0.77	35	2	2		0.41	0.25	0.93
17	1	2		0.49	0.66	0.76	36	2	2		0.50	0.41	0.69
18	1	2		0.11	0.66	0.24	37	2	2		0.35	0.25	0.54
19	1	2		0.19	0.66	0.27	38	2	2		0.35	0.33	0.76
20	2	3	8	0.42	0.00	0.69							

**Table 30. Constructed-Response Item Analyses, Spanish Grade 03 Writing**

Mean Item-Total Corr.: 0.5 Mean p-Value: 0.67

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
4	A	1	3	8	0.43	21.14	78.20				0.66	0.78
4	B	1	3	7	0.32	76.71	22.63				0.66	0.23
4	C	1	3	8	0.52	36.50	62.84				0.66	0.63
4	D	1	3	8	0.49	43.27	56.07				0.66	0.56
4	E	1	3	7	0.42	46.90	52.44				0.66	0.52
4	F	1	3	7	0.39	21.55	77.79				0.66	0.78
16	A	1	2	5	0.52	14.20	52.52	32.45			0.83	0.59
16	B	1	2	5	0.50	25.43	73.74				0.83	0.74
16	C	1	2	5	0.52	27.00	72.17				0.83	0.72
16	D	1	3	5	0.48	16.27	82.91				0.83	0.83
27	A	2	2	5	0.56	17.09	48.72	33.36			0.83	0.58
27	B	2	2	5	0.56	28.49	70.77				0.74	0.71
27	C	2	2	5	0.58	29.23	70.02				0.74	0.70
27	D	2	3	5	0.56	16.76	82.49				0.74	0.82
39	A	2	2	5	0.55	14.37	45.83	39.22			0.58	0.62
39	B	2	2	5	0.51	26.59	72.83				0.58	0.73
39	C	2	2	5	0.55	32.20	67.22				0.58	0.67
39	D	2	3	5	0.47	13.21	86.21				0.58	0.86

**Table 31. Multiple-Choice Item Analyses, English Grade 03 Mathematics**

Mean Item-Total Corr.: 0.43 Mean p-Value: 0.74

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
1	1	2		0.54	0.06	0.81	21	2	1		0.51	0.07	0.71
2	1	4		0.38	0.13	0.31	22	2	2		0.32	0.10	0.65
3	1	4		0.42	0.14	0.52	23	2	6		0.28	0.32	0.91
5	1	1		0.29	0.28	0.94	25	2	1		0.44	0.26	0.78
6	1	1		0.42	0.42	0.88	27	2	4		0.53	0.30	0.57
7	1	4		0.24	0.22	0.96	28	2	4		0.45	0.37	0.81
8	1	2		0.46	0.09	0.72	29	2	2		0.54	0.32	0.75
10	1	4		0.23	0.14	0.97	30	2	2		0.57	0.28	0.65
11	1	2		0.58	0.25	0.62	31	2	6		0.47	1.38	0.69
12	1	6		0.45	0.20	0.81	32	2	4		0.58	0.40	0.65
13	1	4		0.40	0.79	0.65	34	2	6		0.45	0.78	0.71
14	1	4		0.43	0.16	0.76	35	2	4		0.22	0.15	0.90
15	1	2		0.33	0.18	0.76	36	2	6		0.46	1.38	0.60
17	1	2		0.53	0.15	0.52	37	2	1		0.44	1.11	0.75
18	1	2		0.48	0.27	0.88	38	2	4		0.35	0.22	0.84
19	1	4		0.39	0.20	0.80	39	2	1		0.51	0.25	0.73

**Table 32. Constructed-Response Item Analyses, English Grade 03 Mathematics**

Mean Item-Total Corr.: 0.62 Mean p-Value: 0.56

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
4		1	2		0.60	32.22	19.11	48.46			0.21	0.58
9		1	6		0.61	28.08	59.67	12.15			0.10	0.42
16		1	1		0.63	44.30	25.59	29.82			0.29	0.43
20		1	4		0.69	14.41	41.09	20.92	23.52		0.06	0.51
24		2	1		0.69	44.29	38.52	16.84			0.34	0.36
26		2	4		0.58	9.06	32.04	58.66			0.24	0.75
33		2	2		0.50	8.04	28.24	63.62			0.10	0.78
40		2	6		0.63	2.95	39.83	26.01	31.05		0.16	0.62

**Table 33. Multiple-Choice Item Analyses, English Grade 04 Reading**

Mean Item-Total Corr.: 0.43 Mean p-Value: 0.68

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
4	3	4	1	0.53	0.02	0.86	42	4	6	1	0.35	0.44	0.53
5	3	5		0.50	0.10	0.62	43	4	6	1	0.48	0.52	0.88
6	3	4	1	0.40	0.23	0.80	45	4	4	1	0.33	0.67	0.85
7	3	1	1	0.52	0.08	0.81	46	4	4	1	0.50	0.85	0.60
8	3	1	1	0.47	0.15	0.68	47	4	4	1	0.43	1.02	0.79
9	3	1	3	0.43	0.18	0.89	48	4	1	3	0.50	1.11	0.59
12	3	1	2	0.39	0.18	0.56	49	4	1	1	0.33	1.07	0.51
13	3	1	3	0.44	0.19	0.69	50	4	1	3	0.44	1.10	0.80
14	3	6	2	0.43	0.37	0.47	51	4	5		0.20	1.27	0.33
16	3	1	2	0.57	0.52	0.68	52	4	5		0.41	1.50	0.48
17	3	5		0.19	0.70	0.41	95	6	4	2	0.50	0.07	0.68
18	3	6	1	0.34	0.38	0.38	96	6	4	2	0.42	0.16	0.81
19	3	6	1	0.15	0.69	0.18	97	6	4	2	0.44	0.21	0.90
21	3	1	3	0.41	1.05	0.43	98	6	5		0.49	0.12	0.83
25	4	1	1	0.45	0.38	0.81	99	6	5		0.43	0.41	0.53
26	4	1	1	0.24	0.08	0.81	100	6	1	3	0.45	0.11	0.90
27	4	1	3	0.44	0.07	0.87	101	6	5		0.51	0.23	0.76
28	4	1	3	0.39	0.18	0.88	104	6	1	2	0.43	0.30	0.89
30	4	1	2	0.37	0.11	0.76	105	6	1	2	0.51	0.51	0.88
31	4	4	2	0.36	0.23	0.48	106	6	1	2	0.49	0.22	0.85
33	4	4	2	0.57	0.21	0.81	107	6	1	2	0.31	0.32	0.60
34	4	4	2	0.50	0.34	0.71	108	6	1	2	0.29	0.36	0.60
35	4	1	2	0.52	0.30	0.70	109	6	6	1	0.32	0.15	0.78
36	4	5		0.44	0.99	0.44	110	6	6	1	0.49	0.27	0.74
37	4	1	3	0.55	0.21	0.82	111	6	6	1	0.52	0.28	0.71
38	4	5		0.50	0.27	0.60	112	6	4	1	0.56	0.28	0.77
40	4	4	1	0.33	0.30	0.51	113	6	6	1	0.56	0.29	0.86
41	4	6	1	0.51	0.45	0.80	114	6	1	3	0.32	0.34	0.43

**Table 34. Constructed-Response Item Analyses, English Grade 04 Reading**

Mean Item-Total Corr.: 0.52 Mean p-Value: 0.54

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
10		3	6	1	0.51	19.49	39.29	40.50			0.73	0.60
11		3	6	1	0.53	16.88	48.25	28.16	5.48		1.23	0.40
15		3	4	2	0.46	27.71	54.85	14.77			2.66	0.42
20		3	5		0.60	29.08	18.30	24.93	25.32		2.37	0.48
22		3	1	1	0.58	22.62	38.05	31.53	4.62		3.19	0.38
24		4	1	1	0.57	19.45	24.50	34.91	20.57		0.57	0.52
29		4	1	1	0.45	9.69	37.40	52.49			0.42	0.71
32		4	1	2	0.44	30.86	58.25	9.78			1.11	0.39
39		4	4	1	0.42	16.50	51.58	22.03	8.88		1.00	0.41
44		4	5		0.53	23.06	21.41	54.58			0.95	0.65
102		6	5		0.47	9.61	15.27	74.72			0.39	0.82
103		6	1	2	0.58	6.29	8.53	19.38	65.28		0.52	0.81
115		6	5		0.60	23.57	20.85	53.84			1.74	0.64
116		6	6	1	0.58	21.36	45.72	28.72	3.09		1.11	0.37



**Table 35. Multiple-Choice Item Analyses, Spanish Grade 04 Reading**

Mean Item-Total Corr.: 0.35 Mean p-Value: 0.62

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
4	3	1	2	0.32	0.88	0.49	39	4	5		0.35	1.77	0.68
5	3	5		0.43	0.00	0.51	40	4	1	1	0.49	1.77	0.77
6	3	6	2	0.20	0.00	0.75	41	4	1	1	0.45	1.77	0.55
7	3	5		0.37	0.88	0.34	43	4	1	1	0.38	0.88	0.39
8	3	6	2	0.16	0.00	0.38	46	4	1	3	0.45	3.54	0.85
9	3	4	2	0.38	0.00	0.75	47	4	6	3	0.14	3.54	0.34
10	3	4	2	0.36	0.00	0.67	48	4	5		0.20	3.54	0.29
11	3	1	3	0.17	0.00	0.68	91	6	1	2	0.36	0.00	0.87
12	3	6	2	0.17	0.00	0.34	92	6	1	3	0.40	0.00	0.70
15	3	4	1	0.25	0.00	0.73	93	6	1	3	0.34	0.00	0.46
16	3	1	1	0.44	0.00	0.81	94	6	1	2	0.31	0.00	0.73
17	3	4	1	0.28	0.00	0.87	95	6	1	2	0.41	0.00	0.84
18	3	1	1	0.50	0.00	0.75	96	6	1	2	0.34	0.00	0.58
19	3	6	1	0.22	0.00	0.94	99	6	6	1	0.24	0.00	0.60
20	3	1	1	0.03	0.00	0.59	101	6	4	1	0.31	0.00	0.47
21	3	1	1	0.46	0.00	0.53	102	6	4	1	0.29	0.00	0.34
22	3	1	1	0.46	0.00	0.58	103	6	1	3	0.42	0.00	0.81
23	3	6	1	0.49	0.00	0.50	104	6	1	3	0.48	1.77	0.65
24	3	6	1	0.34	0.00	0.76	105	6	5		0.34	1.77	0.67
26	4	1	2	0.35	0.00	0.48	106	6	5		0.23	0.00	0.39
27	4	1	3	0.26	0.00	0.83	107	6	5		0.32	0.00	0.58
28	4	4	2	0.40	0.00	0.70	109	6	1	2	0.35	0.00	0.72
30	4	4	2	0.28	0.00	0.43	110	6	1	2	0.35	0.88	0.61
32	4	4	2	0.38	0.00	0.50	111	6	4	2	0.62	0.88	0.68
35	4	4	1	0.47	2.65	0.75	112	6	1	3	0.31	0.88	0.55
36	4	1	1	0.48	0.00	0.68	113	6	1	3	0.21	0.88	0.74
37	4	1	3	0.46	0.00	0.82	114	6	5		0.37	0.88	0.77
38	4	5		0.53	0.88	0.49	115	6	5		0.52	0.88	0.58

**Table 36. Constructed-Response Item Analyses, Spanish Grade 04 Reading**

Mean Item-Total Corr.: 0.5 Mean p-Value: 0.47

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
13		3	1	2	0.52	23.89	23.89	37.17	14.16		0.88	0.47
14		3	5		0.46	40.71	49.56	6.19			3.54	0.31
29		4	5		0.64	14.16	9.73	16.81	59.29		0.00	0.74
31		4	4	2	0.49	54.87	27.43	17.70			0.00	0.31
33		4	6	1	0.45	28.32	34.51	23.89	11.50		1.77	0.39
34		4	1	1	0.66	20.35	15.93	28.32	32.74		2.65	0.57
42		4	1	1	0.48	49.56	30.09	18.58			1.77	0.34
44		4	6	1	0.42	18.58	27.43	49.56			4.42	0.63
45		4	4	1	0.43	25.66	27.43	28.32	12.39		6.19	0.40
97		6	4	1	0.36	30.09	41.59	26.55			1.77	0.47
98		6	6	1	0.56	37.17	31.86	20.35	8.85		1.77	0.33
100		6	6	1	0.48	39.82	47.79	10.62			1.77	0.35
108		6	1	2	0.54	17.70	19.47	62.83			0.00	0.73
116		6	5		0.54	18.58	5.31	56.64	17.70		1.77	0.57

**Table 37. Multiple-Choice Item Analyses, English Grade 04 Writing**

Mean Item-Total Corr.: 0.4 Mean p-Value: 0.73

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
53	5	3	7	0.32	0.20	0.88	74	5	2	5	0.29	0.30	0.48
54	5	3	7	0.39	0.25	0.89	75	5	3	8	0.48	0.43	0.60
55	5	3	7	0.38	0.58	0.61	76	5	3	8	0.46	0.50	0.59
56	5	3	7	0.28	2.87	0.84	77	5	3	8	0.37	0.80	0.47
57	5	2		0.41	2.96	0.66	78	5	2		0.36	0.31	0.86
58	5	3	7	0.39	0.28	0.89	79	5	3	7	0.44	0.44	0.69
59	5	3	7	0.27	0.23	0.94	80	5	3	8	0.49	1.05	0.80
60	5	2		0.32	0.25	0.88	81	5	3	8	0.42	0.56	0.91
61	5	3	8	0.33	0.54	0.42	82	5	3	8	0.54	0.78	0.63
62	5	3	7	0.41	0.35	0.88	83	5	3	8	0.39	1.56	0.86
63	5	3	7	0.36	0.51	0.90	84	5	2		0.49	0.55	0.67
64	5	3	7	0.34	0.61	0.91	85	5	3	7	0.24	1.11	0.40
65	5	2		0.35	1.05	0.80	86	5	2		0.49	1.02	0.82
66	5	3	8	0.43	1.23	0.61	87	5	2		0.56	1.51	0.79
67	5	3	8	0.47	2.23	0.81	88	5	3	7	0.42	1.73	0.80
68	5	2	5	0.35	0.21	0.86	89	5	3	7	0.51	2.06	0.78
69	5	2	5	0.36	0.27	0.56	90	5	2	5	0.24	0.72	0.35
70	5	3	8	0.43	0.28	0.58	91	5	2	5	0.47	0.86	0.74
71	5	3	7	0.55	0.41	0.73	92	5	2	5	0.30	0.84	0.58
72	5	2	5	0.35	0.22	0.88	93	5	2	5	0.47	0.97	0.74

**Table 38. Constructed-Response Item Analyses, English Grade 04 Writing**

Mean Item-Total Corr.: 0.46 Mean p-Value: 0.73

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
1		1	2	6	0.11	1.40	98.60				0.00	0.99
2	A	2	3	8	0.46	39.54	60.24				0.22	0.60
2	B	2	3	7	0.36	38.73	61.06				0.22	0.61
2	C	2	3	8	0.43	23.15	76.63				0.23	0.77
2	D	2	3	8	0.46	27.52	72.26				0.22	0.72
2	E	2	3	7	0.36	5.79	93.99				0.22	0.94
2	F	2	3	7	0.42	10.18	89.60				0.23	0.90
3	A	2	2	6	0.66	3.21	12.25	34.37	35.86	14.17	0.13	0.61
3	B	2	2	6	0.68	0.16	8.22	38.52	39.12	13.84	0.14	0.64
3	C	2	3	6	0.50	0.21	12.61	87.05			0.13	0.93
23		5	2	5	0.53	1.95	7.60	42.85	36.30	7.72	3.59	0.58
73		5	2	5	0.51	0.23	3.93	43.60	42.63	8.77	0.84	0.64
94		5	2	5	0.56	1.03	7.80	47.25	35.41	6.58	1.92	0.59

**Table 39. Multiple-Choice Item Analyses, Spanish Grade 04 Writing**

Mean Item-Total Corr.: 0.33 Mean p-Value: 0.55

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
49	5	3	7	0.40	0.00	0.85	70	5	3	7	0.47	0.00	0.38
50	5	3	7	0.44	0.00	0.83	71	5	3	7	0.40	0.88	0.50
51	5	2		0.27	0.00	0.82	72	5	3	8	0.22	0.00	0.53
52	5	2		0.37	0.00	0.49	73	5	3	8	0.37	0.00	0.30
53	5	2		0.29	0.00	0.98	74	5	3	8	0.28	0.88	0.72
54	5	3	7	0.30	0.00	0.65	75	5	3	8	0.21	1.77	0.44
55	5	2		0.42	0.00	0.81	76	5	3	7	0.18	0.00	0.48
56	5	3	7	0.15	0.88	0.88	77	5	3	7	0.14	0.00	0.42
57	5	2	5	0.14	0.00	0.47	78	5	3	7	0.30	3.54	0.27
58	5	2	5	0.24	0.00	0.55	79	5	3	8	0.16	0.00	0.55
59	5	2	5	0.25	0.00	0.46	80	5	3	8	0.29	0.00	0.38
60	5	2	5	0.40	0.00	0.58	81	5	3	8	0.40	0.00	0.51
61	5	2	5	0.39	0.00	0.50	82	5	3	8	0.44	1.77	0.40
62	5	2	5	0.07	0.00	0.34	83	5	3	8	0.25	0.00	0.56
64	5	3	7	0.39	0.00	0.43	84	5	3	8	0.47	0.00	0.37
65	5	3	7	0.37	0.00	0.76	85	5	3	8	0.36	0.88	0.48
66	5	3	7	0.34	0.00	0.53	86	5	3	8	0.25	0.00	0.42
67	5	3	7	0.56	0.00	0.63	87	5	2		0.40	0.00	0.40
68	5	3	7	0.45	1.77	0.74	88	5	2		0.44	0.00	0.71
69	5	3	7	0.45	3.54	0.54	89	5	2		0.36	0.88	0.52

**Table 40. Constructed-Response Item Analyses, Spanish Grade 04 Writing**

Mean Item-Total Corr.: 0.38 Mean p-Value: 0.59

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
1		1	2	6	0.23	5.31	94.69				0.00	0.95
2	A	2	3	7	0.45	7.96	92.04				0.00	0.92
2	B	2	3	7	0.31	27.43	72.57				0.00	0.73
2	C	2	3	7	0.48	25.66	74.34				0.00	0.74
2	D	2	3	8	0.12	32.74	67.26				0.00	0.67
2	E	2	3	7	0.10	59.29	40.71				0.00	0.41
2	F	2	3	8	0.30	89.38	10.62				0.00	0.11
3	A	2	2	6	0.46	23.89	4.42	45.13	21.24	5.31	0.00	0.45
3	B	2	2	6	0.53	4.42	15.93	54.87	21.24	3.54	0.00	0.51
3	C	2	3	6	0.47	3.54	38.05	58.41			0.00	0.77
25		5	2	5	0.54	16.81	28.32	29.20	20.35	2.65	2.65	0.40
63		5	2	5	0.50	7.96	21.24	48.67	15.93	6.19	0.00	0.48
90		5	2	5	0.50	1.77	15.04	41.59	31.86	8.85	0.88	0.57

**Table 41. Multiple-Choice Item Analyses, English Grade 04 Mathematics**

Mean Item-Total Corr.: 0.41 Mean p-Value: 0.75

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
1	1	2	2	0.53	0.04	0.59	36	2	4		0.32	0.47	0.92
2	1	2	2	0.54	0.05	0.78	37	2	3		0.56	0.10	0.68
3	1	1		0.35	0.27	0.52	38	2	1	1	0.36	0.39	0.64
4	1	6		0.43	0.84	0.76	39	2	1	1	0.32	0.63	0.37
6	1	2	2	0.47	0.07	0.89	41	2	1	1	0.30	0.24	0.77
7	1	1	1	0.34	0.17	0.93	42	2	3		0.51	0.35	0.83
8	1	6		0.46	0.71	0.80	43	2	4		0.23	0.30	0.91
9	1	6	1	0.38	0.18	0.89	44	2	4		0.35	0.32	0.90
10	1	3		0.51	0.55	0.63	45	2	4		0.31	0.36	0.92
12	1	1	1	0.30	0.19	0.96	47	3	4	3	0.33	0.06	0.94
13	1	4		0.30	0.16	0.80	48	3	1	1	0.34	0.03	0.87
14	1	6		0.40	1.02	0.52	50	3	4		0.23	0.23	0.96
16	1	3		0.48	0.34	0.74	51	3	4		0.42	0.36	0.75
17	1	4		0.47	0.19	0.63	52	3	4		0.47	0.24	0.79
19	1	4		0.28	0.21	0.90	53	3	3		0.39	0.28	0.91
20	1	1	1	0.46	0.30	0.56	54	3	6		0.34	0.76	0.88
21	1	2	2	0.50	0.40	0.50	56	3	1	1	0.50	0.30	0.84
22	1	3		0.35	1.09	0.25	57	3	2	2	0.41	0.35	0.71
24	2	3		0.51	0.07	0.64	58	3	4		0.54	0.24	0.72
25	2	4		0.52	0.10	0.70	59	3	4		0.41	0.26	0.93
26	2	4	3	0.18	0.16	0.98	61	3	1		0.51	0.25	0.65
27	2	6		0.50	0.75	0.73	62	3	6		0.21	0.79	0.95
29	2	4	3	0.32	0.17	0.88	63	3	6	1	0.60	1.24	0.67
31	2	6		0.35	0.69	0.83	64	3	6		0.46	0.71	0.66
32	2	2		0.47	0.12	0.82	66	3	3		0.42	0.25	0.60
34	2	3		0.44	0.28	0.49	67	3	4	3	0.29	0.15	0.87
35	2	6	1	0.49	0.72	0.73	68	3	6		0.47	1.43	0.57

**Table 42. Constructed-Response Item Analyses, English Grade 04 Mathematics**

Mean Item-Total Corr.: 0.6 Mean p-Value: 0.61

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
5		1	4		0.57	15.10	22.49	62.18			0.23	0.73
11		1	3		0.60	33.04	39.91	26.63			0.42	0.47
15		1	4		0.45	2.47	11.74	37.67	48.05		0.07	0.77
18		1	4	3	0.60	6.03	29.79	30.72	33.38		0.09	0.64
23		1	6	1	0.70	7.20	35.84	22.99	19.91	13.78	0.27	0.49
28		2	1	1	0.62	52.06	13.04	27.10	7.52		0.28	0.30
30		2	1	1	0.63	12.97	20.77	65.14			1.12	0.76
33		2	1	1	0.69	36.94	38.96	23.76			0.33	0.43
40		2	1	1	0.64	47.18	21.10	15.06	16.46		0.21	0.34
46		2	2	2	0.69	8.30	11.60	18.32	26.77	34.88	0.14	0.67
49		3	2	2	0.49	6.70	37.74	55.45			0.11	0.74
55		3	6	1	0.59	1.34	26.09	24.43	48.06		0.07	0.73
60		3	2	2	0.40	3.99	20.12	75.81			0.08	0.86
65		3	3		0.67	23.06	21.18	18.61	37.00		0.15	0.56
69		3	4	3	0.68	9.19	12.85	21.54	27.48	28.87	0.08	0.63

**Table 43. Multiple-Choice Item Analyses, English Grade 05 Reading**

Mean Item-Total Corr.: 0.4 Mean p-Value: 0.67

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
5	3	4	1	0.38	0.44	0.85	40	4	5		0.32	0.23	0.55
7	3	1	3	0.48	0.13	0.65	41	4	5		0.39	0.14	0.56
8	3	1	1	0.22	0.18	0.29	42	4	4	1	0.32	0.32	0.61
9	3	5		0.34	0.13	0.52	44	4	4	1	0.34	0.18	0.58
13	3	6	2	0.46	0.22	0.55	45	4	6	1	0.48	0.28	0.85
14	3	4	2	0.42	0.71	0.91	46	4	6	1	0.41	0.25	0.61
15	3	4	2	0.45	0.35	0.64	47	4	6	1	0.44	0.26	0.92
16	3	1	3	0.42	0.39	0.83	49	4	5		0.18	0.30	0.28
17	3	5		0.45	0.41	0.68	50	4	4	2	0.13	0.39	0.36
18	3	5		0.24	0.34	0.56	51	4	5		0.34	0.27	0.59
19	3	1	3	0.34	0.52	0.51	52	4	5		0.19	0.34	0.54
20	3	1	2	0.46	0.57	0.60	97	6	1	2	0.46	0.33	0.91
21	3	1	3	0.48	0.61	0.73	98	6	5		0.17	0.16	0.48
22	3	6	2	0.47	0.75	0.53	99	6	1	3	0.34	0.23	0.75
24	3	1	2	0.57	1.02	0.69	100	6	1	3	0.39	0.16	0.72
25	3	5		0.24	1.10	0.45	101	6	1	3	0.44	1.22	0.72
26	4	1	1	0.29	0.05	0.67	102	6	5		0.40	0.14	0.84
27	4	6	1	0.27	0.08	0.55	103	6	5		0.51	0.51	0.76
29	4	1	1	0.36	0.07	0.75	104	6	5		0.56	0.22	0.83
30	4	4	1	0.48	0.10	0.85	107	6	6	1	0.48	0.23	0.83
31	4	4	1	0.47	0.23	0.76	108	6	4	1	0.50	0.39	0.71
32	4	6	1	0.34	0.28	0.60	109	6	4	1	0.47	0.24	0.58
33	4	5		0.45	0.11	0.77	110	6	1	1	0.49	0.36	0.83
34	4	1	3	0.45	0.22	0.82	111	6	1	1	0.51	0.44	0.79
36	4	4	1	0.24	0.08	0.41	112	6	1	1	0.52	0.68	0.79
37	4	4	1	0.41	0.22	0.74	113	6	1	3	0.34	0.12	0.54
38	4	6	1	0.44	0.19	0.75	114	6	5		0.43	0.29	0.50
39	4	1	3	0.51	0.19	0.85	115	6	1	1	0.56	0.21	0.75

**Table 44. Constructed-Response Item Analyses, English Grade 05 Reading**

Mean Item-Total Corr.: 0.51 Mean p-Value: 0.49

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
4		3	1	1	0.47	50.36	27.38	21.44			0.82	0.35
6		3	6	1	0.44	16.67	58.93	16.24	6.72		1.44	0.37
10		3	1	2	0.43	31.74	30.08	19.44	18.28		0.45	0.41
11		3	4	2	0.66	21.47	12.56	36.66	28.24		1.08	0.57
12		3	5		0.56	18.34	43.65	27.29	9.68		1.04	0.42
23		3	4	2	0.41	32.34	54.83	10.59			2.23	0.38
28		4	6	1	0.48	41.13	49.35	8.94			0.58	0.34
35		4	6	1	0.31	31.76	52.95	5.41	7.26		2.63	0.29
43		4	4	1	0.44	14.08	47.19	25.45	12.54		0.74	0.45
48		4	5		0.47	14.17	21.50	63.75			0.59	0.74
95		6	1	2	0.66	26.96	7.70	64.29			1.04	0.68
96		6	1	2	0.56	16.39	30.97	52.07			0.57	0.68
105		6	1	1	0.64	17.65	19.80	61.85			0.70	0.72
106		6	6	1	0.65	28.61	27.00	38.07	5.46		0.87	0.40



**Table 45. Multiple-Choice Item Analyses, English Grade 05 Writing**

Mean Item-Total Corr.: 0.42 Mean p-Value: 0.72

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
53	5	2		0.36	0.16	0.49	74	5	3	8	0.41	0.52	0.85
54	5	3	7	0.37	0.14	0.56	75	5	2	5	0.27	0.23	0.60
55	5	3	7	0.30	1.45	0.92	76	5	2	7	0.54	0.28	0.83
56	5	2		0.38	1.73	0.91	77	5	2	7	0.55	0.47	0.73
57	5	3	8	0.48	0.13	0.82	78	5	2	7	0.52	0.73	0.73
58	5	3	8	0.39	0.32	0.89	79	5	2	7	0.51	0.64	0.79
59	5	3	8	0.26	0.31	0.84	80	5	3	7	0.23	0.60	0.23
60	5	3	8	0.42	0.12	0.89	81	5	3	7	0.46	0.77	0.87
61	5	3	8	0.43	0.21	0.68	82	5	3	7	0.51	0.66	0.72
62	5	3	8	0.38	0.24	0.50	83	5	3	7	0.33	0.57	0.43
63	5	3	8	0.51	0.45	0.81	84	5	3	7	0.52	0.64	0.78
65	5	3	8	0.40	0.17	0.70	85	5	2	5	0.40	0.57	0.62
66	5	3	8	0.48	0.27	0.86	86	5	2	5	0.36	0.48	0.65
67	5	3	8	0.45	0.33	0.89	87	5	2	5	0.31	0.50	0.52
68	5	3	8	0.42	0.19	0.52	88	5	2	8	0.45	0.63	0.69
69	5	2		0.39	0.35	0.85	89	5	2	8	0.37	0.98	0.61
70	5	2		0.45	0.81	0.79	90	5	3	7	0.28	0.66	0.44
71	5	2		0.35	0.30	0.91	91	5	3	7	0.43	0.98	0.82
72	5	3	8	0.46	0.46	0.75	92	5	3	7	0.51	0.98	0.83
73	5	3	8	0.48	0.93	0.65	93	5	3	7	0.53	1.11	0.72

**Table 46. Constructed-Response Item Analyses, English Grade 05 Writing**

Mean Item-Total Corr.: 0.45 Mean p-Value: 0.75

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
1		1	2	6	0.13	1.15	98.85				0.00	0.99
2	A	2	3	8	0.40	22.39	77.48				0.13	0.77
2	B	2	3	7	0.35	10.59	89.27				0.14	0.89
2	C	2	3	7	0.35	6.02	93.85				0.13	0.94
2	D	2	3	7	0.23	11.84	88.03				0.14	0.88
2	E	2	3	8	0.49	55.86	44.00				0.13	0.44
2	F	2	3	8	0.51	30.97	68.89				0.14	0.69
3	A	2	2	6	0.62	2.48	5.80	40.33	41.10	10.19	0.10	0.63
3	B	2	2	6	0.63	0.18	6.60	42.92	39.75	10.46	0.10	0.63
3	C	2	3	6	0.47	0.29	10.96	88.65			0.09	0.94
64		5	2	5	0.51	0.22	2.49	26.68	56.82	13.34	0.45	0.70
94		5	2	5	0.54	0.48	4.96	43.51	41.93	7.23	1.90	0.62
116		5	2	5	0.57	0.54	4.05	36.79	46.59	11.50	0.53	0.66

**Table 47. Multiple-Choice Item Analyses, English Grade 05 Mathematics**

Mean Item-Total Corr.: 0.41 Mean p-Value: 0.68

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
1	1	4	1	0.38	0.02	0.73	36	2	1		0.42	0.37	0.61
2	1	1	1	0.50	1.04	0.49	37	2	1	1	0.59	0.28	0.46
3	1	4		0.32	0.20	0.75	38	2	4		0.40	0.27	0.53
4	1	1		0.47	0.51	0.65	40	2	6		0.40	0.36	0.91
6	1	3		0.50	0.16	0.58	41	2	4		0.36	0.16	0.66
7	1	6		0.44	0.74	0.70	42	2	4		0.31	0.12	0.91
8	1	1	1	0.50	0.18	0.68	43	2	6		0.47	0.81	0.65
9	1	1	1	0.29	0.06	0.90	44	2	3	3	0.34	0.27	0.76
11	1	1	1	0.48	0.92	0.70	45	2	6		0.30	0.52	0.87
12	1	4		0.34	0.09	0.89	47	3	2		0.37	0.04	0.86
13	1	1	1	0.57	0.34	0.52	48	3	4		0.36	0.10	0.77
14	1	1	1	0.45	0.13	0.44	50	3	2	2	0.33	0.06	0.89
15	1	6	1	0.49	0.25	0.64	51	3	6		0.40	0.14	0.87
16	1	6		0.42	0.33	0.84	52	3	2	2	0.50	0.16	0.62
18	1	2		0.51	0.12	0.71	53	3	3	3	0.26	0.38	0.92
19	1	4		0.14	0.07	0.42	55	3	1	1	0.40	0.13	0.58
21	1	3		0.39	0.19	0.60	56	3	4		0.51	0.15	0.75
22	1	4		0.29	0.22	0.62	57	3	6		0.51	0.38	0.64
24	2	1	1	0.53	0.07	0.58	58	3	1		0.34	0.57	0.50
25	2	6		0.43	0.24	0.80	59	3	6		0.41	0.82	0.80
26	2	3		0.38	0.77	0.59	61	3	4		0.41	0.19	0.45
28	2	1	1	0.50	0.36	0.80	62	3	6		0.41	0.49	0.70
29	2	4		0.31	0.11	0.35	63	3	3		0.41	0.20	0.73
30	2	3		0.47	0.29	0.64	64	3	6		0.43	0.11	0.89
31	2	6		0.43	0.47	0.36	65	3	6		0.29	0.63	0.91
32	2	2	3	0.38	0.33	0.84	67	3	2	2	0.47	0.18	0.75
34	2	1	1	0.34	0.41	0.74	68	3	2	2	0.44	0.42	0.28

**Table 48. Constructed-Response Item Analyses, English Grade 05 Mathematics**

Mean Item-Total Corr.: 0.61 Mean p-Value: 0.61

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
5		1	4		0.59	11.02	43.54	45.22			0.22	0.67
10		1	3	3	0.56	2.34	28.32	28.39	40.38		0.57	0.69
17		1	2	2	0.60	15.10	20.88	63.84			0.18	0.74
20		1	6		0.70	41.13	24.96	17.91	15.67		0.34	0.36
23		1	2	2	0.65	3.60	7.01	13.34	27.50	48.40	0.15	0.77
27		2	2	2	0.60	39.52	21.64	38.60			0.24	0.49
33		2	4		0.58	33.94	36.96	14.85	14.04		0.22	0.36
35		2	1	1	0.54	5.51	10.60	78.97			4.92	0.84
39		2	2	2	0.52	30.68	33.00	23.14	13.07		0.10	0.40
46		2	3	3	0.73	4.77	20.46	32.45	19.05	23.12	0.15	0.59
49		3	6		0.66	36.72	16.43	46.74			0.11	0.55
54		3	1		0.62	9.74	22.29	18.23	49.51		0.23	0.69
60		3	3	3	0.52	15.90	30.90	52.73			0.47	0.68
66		3	3	3	0.63	14.89	17.31	18.02	49.64		0.14	0.67
69		3	4		0.66	2.84	17.03	20.34	21.09	38.57	0.13	0.69

**Table 49. Multiple-Choice Item Analyses, English Grade 05 Science**

Mean Item-Total Corr.: 0.36 Mean p-Value: 0.67

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
1	1	3		0.30	0.03	0.83	39	2	1	1	0.22	0.39	0.49
2	1	3		0.32	0.06	0.28	40	2	1	2	0.28	0.26	0.97
3	1	3		0.39	0.09	0.47	41	2	3		0.42	0.10	0.85
4	1	2		0.35	0.03	0.61	43	2	2		0.46	0.22	0.75
5	1	4		0.34	0.11	0.57	44	2	1	1	0.40	0.08	0.73
6	1	3		0.33	0.22	0.77	45	2	1		0.43	0.08	0.71
7	1	4		0.38	0.05	0.91	47	2	4		0.37	0.07	0.53
9	1	1	1	0.22	0.33	0.39	48	2	1		0.46	0.08	0.60
10	1	1	1	0.52	0.11	0.80	50	2	1	1	0.55	0.19	0.79
11	1	2		0.30	0.04	0.78	51	3	4		0.36	0.02	0.83
12	1	3		0.35	0.08	0.95	52	3	1	1	0.46	0.04	0.86
13	1	1	1	0.33	0.25	0.26	53	3	2		0.32	0.15	0.75
14	1	3		0.19	0.07	0.61	54	3	4		0.42	0.11	0.73
15	1	1	2	0.53	0.04	0.74	56	3	4		0.34	0.27	0.61
16	1	2		0.21	0.15	0.19	57	3	1	2	0.45	0.17	0.56
17	1	4		0.21	0.40	0.24	59	3	4		0.19	0.09	0.91
18	1	1	2	0.38	0.08	0.68	60	3	4		0.32	0.21	0.45
19	1	2		0.53	0.21	0.67	61	3	1	1	0.33	0.25	0.60
20	1	4		0.33	0.12	0.52	63	3	1	1	0.42	0.22	0.65
26	2	4		0.31	0.04	0.89	64	3	1	1	0.37	0.27	0.46
27	2	2		0.42	0.04	0.81	65	3	1	2	0.34	0.20	0.92
28	2	1		0.37	0.08	0.57	67	3	1	1	0.46	0.32	0.80
30	2	3		0.35	0.12	0.69	68	3	1	1	0.30	0.14	0.63
31	2	2		0.54	0.16	0.61	69	3	4		0.43	0.36	0.82
32	2	2		0.32	0.11	0.67	70	3	3		0.36	0.59	0.64
33	2	2		0.37	0.12	0.79	72	3	3		0.42	0.16	0.90
35	2	3		0.21	0.15	0.87	73	3	2		0.44	0.37	0.56
36	2	2		0.33	0.27	0.39	74	3	1	1	0.41	0.29	0.67
38	2	3		0.15	0.24	0.94							

**Table 50. Constructed-Response Item Analyses, English Grade 05 Science**

Mean Item-Total Corr.: 0.46 Mean p-Value: 0.5

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
8		1	1		0.36	81.79	5.91	11.39			0.90	0.14
21		1	1	1	0.19	27.49	72.42				0.10	0.72
22		1	1	1	0.40	58.82	40.86				0.32	0.41
23		1	1	1	0.55	21.83	44.06	33.57			0.54	0.56
24		1	1	2	0.61	19.38	40.18	40.16			0.28	0.60
25		1	1	2	0.44	34.09	65.46				0.45	0.65
29		2	2		0.44	52.11	24.81	22.83			0.25	0.35
34		2	3		0.48	41.79	33.89	23.65			0.67	0.41
37		2	4		0.52	53.59	27.20	18.74			0.46	0.32
42		2	4		0.50	49.30	50.16				0.54	0.50
46		2	2		0.61	21.28	37.53	40.92			0.26	0.60
49		2	4		0.51	30.48	61.76	7.20			0.55	0.38
55		3	2		0.49	7.54	31.55	60.47			0.44	0.76
58		3	3		0.36	48.60	51.19				0.20	0.51
62		3	3		0.36	10.19	63.63	25.91			0.26	0.58
66		3	1	2	0.49	42.95	42.22	14.11			0.71	0.35
71		3	1	2	0.46	26.12	55.27	18.12			0.49	0.46
75		3	1	2	0.49	9.66	30.05	59.80			0.48	0.75

**Table 51. Multiple-Choice Item Analyses, English Grade 06 Reading**

Mean Item-Total Corr.: 0.40 Mean p-Value: 0.70

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
5	3	4	1	0.35	0.62	0.89	42	4	5		0.36	0.21	0.49
7	3	1	3	0.49	0.11	0.73	43	4	5		0.38	3.22	0.56
8	3	1	1	0.28	0.24	0.34	44	4	5		0.48	0.20	0.74
9	3	6	1	0.22	0.38	0.54	45	4	5		0.49	0.28	0.61
10	3	5		0.36	0.14	0.57	46	4	5		0.54	0.25	0.73
13	3	1	2	0.42	0.49	0.53	47	4	5		0.43	0.43	0.70
14	3	1	2	0.45	1.29	0.62	48	4	5		0.43	0.15	0.86
15	3	1	2	0.48	0.24	0.78	49	4	5		0.51	0.20	0.90
16	3	1	3	0.38	0.37	0.81	50	4	5		0.44	0.19	0.92
17	3	1	3	0.38	0.54	0.90	95	6	6	1	0.31	0.16	0.66
19	3	5		0.43	0.58	0.86	96	6	4	1	0.36	0.23	0.56
20	3	1	1	0.48	0.53	0.80	97	6	1	3	0.35	0.16	0.51
21	3	4	1	0.38	0.68	0.79	98	6	1	3	0.37	0.34	0.80
22	3	1	1	0.39	0.90	0.83	99	6	1	3	0.56	0.57	0.84
23	3	1	1	0.42	1.24	0.57	100	6	4	1	0.33	0.16	0.45
25	3	5		0.58	1.30	0.66	101	6	1	1	0.49	0.38	0.86
26	3	1	3	0.44	1.40	0.91	102	6	1	1	0.33	0.23	0.45
28	4	6	1	0.28	0.06	0.62	103	6	4	1	0.37	0.16	0.84
30	4	1	1	0.24	0.11	0.71	104	6	4	1	0.36	0.19	0.95
31	4	1	1	0.35	0.15	0.80	105	6	6	1	0.43	0.21	0.70
33	4	6	1	0.43	0.11	0.70	107	6	6	1	0.37	0.39	0.46
34	4	5		0.41	0.19	0.80	108	6	1	3	0.25	0.32	0.49
35	4	1	3	0.43	0.40	0.85	109	6	5		0.39	0.32	0.66
37	4	5		0.35	0.50	0.63	112	6	1	2	0.46	0.27	0.79
38	4	5		0.38	0.22	0.60	113	6	4	2	0.44	0.45	0.56
39	4	5		0.38	0.27	0.54	114	6	1	2	0.58	0.55	0.73
40	4	5		0.36	0.21	0.76	115	6	1	3	0.40	1.04	0.62
41	4	1	2	0.44	0.31	0.58	116	6	1	3	0.44	1.14	0.88

**Table 52. Constructed-Response Item Analyses, English Grade 06 Reading**

Mean Item-Total Corr.: 0.52 Mean p-Value: 0.45

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
4		3	1	1	0.47	44.08	29.18	25.61			1.12	0.40
6		3	6	1	0.43	12.72	53.94	19.33	11.95		2.05	0.43
11		3	4	2	0.49	38.35	22.30	26.26	12.19		0.91	0.37
12		3	4	2	0.55	15.80	3.18	23.03	57.39		0.60	0.74
18		3	6	1	0.55	23.75	39.96	34.85			1.44	0.55
24		3	6	1	0.56	25.91	26.90	43.98			3.21	0.57
29		4	6	1	0.53	40.60	46.81	11.99			0.61	0.35
32		4	4	1	0.48	62.46	16.84	14.80	5.16		0.75	0.21
36		4	5		0.50	33.32	31.31	34.24			1.14	0.50
93		6	6	1	0.56	17.88	33.77	27.57	20.11		0.67	0.50
94		6	6	1	0.63	24.81	23.51	50.63			1.05	0.62
106		6	1	1	0.54	18.32	30.59	28.17	15.99	5.66	1.27	0.39
110		6	4	2	0.58	44.09	36.44	17.63			1.84	0.36
111		6	4	2	0.45	33.66	55.54	9.36			1.44	0.37

**Table 53. Multiple-Choice Item Analyses, English Grade 06 Writing**

Mean Item-Total Corr.: 0.42 Mean p-Value: 0.71

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
51	5	3	7	0.44	0.08	0.86	71	5	3	7	0.35	0.53	0.55
52	5	3	8	0.27	0.13	0.88	72	5	3	7	0.53	0.88	0.81
53	5	2		0.45	0.97	0.80	73	5	3	7	0.54	1.16	0.75
54	5	2		0.39	1.29	0.87	74	5	3	7	0.35	0.24	0.68
55	5	2	7	0.43	0.11	0.91	75	5	3	7	0.42	0.49	0.76
56	5	2	7	0.49	0.25	0.83	76	5	3	7	0.36	0.21	0.65
57	5	2	5	0.33	0.21	0.45	78	5	3	8	0.39	0.61	0.61
58	5	2	5	0.36	0.20	0.79	79	5	3	7	0.24	0.78	0.73
59	5	2	5	0.33	0.23	0.46	80	5	3	7	0.38	0.91	0.51
60	5	2	5	0.26	0.29	0.67	81	5	3	7	0.28	0.49	0.61
61	5	3	8	0.52	0.25	0.71	82	5	3	7	0.36	5.57	0.65
62	5	2	5	0.46	0.15	0.90	83	5	2	8	0.46	0.61	0.72
63	5	3	8	0.32	0.40	0.49	84	5	2	8	0.42	0.92	0.67
64	5	3	7	0.40	0.20	0.86	85	5	2	5	0.42	0.58	0.62
65	5	3	7	0.52	0.64	0.79	86	5	2	8	0.39	0.72	0.55
66	5	3	8	0.52	0.58	0.85	87	5	2	8	0.35	0.70	0.59
67	5	3	8	0.57	0.24	0.67	88	5	2	7	0.51	1.12	0.80
68	5	3	7	0.53	0.30	0.69	89	5	3	8	0.36	0.79	0.56
69	5	3	7	0.49	2.06	0.81	90	5	3	8	0.51	1.16	0.75
70	5	3	7	0.46	0.33	0.67	91	5	3	8	0.53	0.96	0.86

**Table 54. Constructed-Response Item Analyses, English Grade 06 Writing**

Mean Item-Total Corr.: 0.44 Mean p-Value: 0.71

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
1		1	2	6	0.12	0.92	99.08				0.00	0.99
2	A	2	3	8	0.36	28.98	70.87				0.15	0.71
2	B	2	3	7	0.46	38.66	61.20				0.15	0.61
2	C	2	3	7	0.33	23.12	76.74				0.14	0.77
2	D	2	3	8	0.45	27.21	72.64				0.14	0.73
2	E	2	3	7	0.37	58.60	41.25				0.15	0.41
2	F	2	3	8	0.41	15.59	84.26				0.14	0.84
3	A	2	2	6	0.63	0.87	3.40	39.90	48.22	7.52	0.09	0.64
3	B	2	2	6	0.65	0.20	4.83	43.99	43.44	7.46	0.08	0.63
3	C	2	3	6	0.45	0.27	8.68	90.97			0.08	0.95
27		5	2	5	0.48	0.41	4.17	35.93	48.29	7.27	3.93	0.62
77		5	2	5	0.52	0.13	3.22	31.88	50.29	13.54	0.94	0.68
92		5	2	5	0.55	0.43	3.32	38.46	46.58	9.12	2.08	0.64



**Table 55. Multiple-Choice Item Analyses, English Grade 06 Mathematics**

Mean Item-Total Corr.: 0.4 Mean p-Value: 0.63

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
1	1	2		0.37	0.12	0.89	31	2	3		0.53	0.27	0.62
2	1	6		0.46	0.39	0.83	32	2	6		0.43	0.78	0.77
3	1	1		0.37	0.08	0.51	34	2	6		0.41	0.61	0.76
5	1	1		0.45	0.19	0.59	35	2	4		0.29	0.61	0.85
6	1	6	1	0.53	0.13	0.65	36	2	2	2	0.43	0.15	0.61
8	1	1		0.30	0.64	0.77	38	2	4	3	0.15	0.16	0.36
9	1	6	1	0.32	0.21	0.59	39	2	2	2	0.29	0.33	0.56
10	1	4		0.39	0.06	0.82	41	3	4		0.47	0.08	0.59
11	1	3	2	0.46	0.09	0.49	42	3	4	3	0.19	0.08	0.58
12	1	3		0.39	0.14	0.60	44	3	1	1	0.37	0.27	0.50
14	1	4		0.26	0.26	0.92	45	3	3		0.45	0.41	0.48
15	1	3		0.43	0.15	0.66	47	3	4		0.48	0.14	0.55
17	1	1	1	0.54	0.19	0.58	48	3	2		0.49	0.39	0.72
18	1	6		0.51	0.62	0.37	50	3	1	1	0.52	0.31	0.67
19	1	4	3	0.38	0.21	0.60	51	3	4	3	0.31	0.29	0.61
21	2	1	1	0.48	0.10	0.40	52	3	6		0.23	0.74	0.92
22	2	1		0.50	0.20	0.37	53	3	4		0.23	0.37	0.58
24	2	6		0.42	0.30	0.87	54	3	4		0.32	0.48	0.43
25	2	3		0.49	0.10	0.72	55	3	6		0.42	0.69	0.79
26	2	1	1	0.31	0.18	0.74	56	3	2	2	0.50	0.51	0.67
27	2	1	1	0.44	0.18	0.40	58	3	1	1	0.44	0.19	0.64
28	2	2	2	0.43	0.19	0.84	59	3	3		0.48	0.30	0.51
30	2	4	3	0.48	0.30	0.58							

**Table 56. Constructed-Response Item Analyses, English Grade 06 Mathematics**

Mean Item-Total Corr.: 0.59 Mean p-Value: 0.57

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
4		1	4		0.39	3.18	20.63	75.96			0.23	0.86
7		1	3		0.50	1.05	12.23	27.44	58.96		0.31	0.81
13		1	4	3	0.64	54.37	24.27	20.80			0.56	0.33
16		1	1	1	0.67	32.65	24.72	6.68	34.59		1.36	0.47
20		1	2	2	0.63	4.96	32.32	29.93	23.84	8.69	0.26	0.50
23		2	2	2	0.59	38.64	7.81	53.38			0.17	0.57
29		2	2	2	0.56	23.23	29.13	26.26	21.19		0.19	0.48
33		2	6	1	0.56	22.71	25.86	51.16			0.27	0.64
37		2	2	2	0.53	8.26	13.71	15.77	61.97		0.29	0.77
40		2	3		0.60	19.66	47.86	19.86	5.56	6.80	0.26	0.33
43		3	3		0.59	20.34	13.43	65.76			0.46	0.72
46		3	6		0.62	26.71	24.53	48.36			0.40	0.61
49		3	4	3	0.62	22.93	35.25	16.29	25.33		0.19	0.48
57		3	4	3	0.55	27.43	44.31	23.19	4.57		0.50	0.35
60		3	1	1	0.75	4.70	17.09	21.85	32.24	23.95	0.18	0.63

**Table 57. Multiple-Choice Item Analyses, English Grade 07 Reading**

Mean Item-Total Corr.: 0.39 Mean p-Value: 0.71

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
7	3	6	1	0.28	0.14	0.77	42	4	5		0.41	0.24	0.80
8	3	1	1	0.43	0.14	0.85	43	4	5		0.43	0.20	0.80
9	3	1	3	0.45	0.13	0.92	44	4	5		0.44	2.96	0.85
10	3	5		0.43	0.11	0.91	45	4	5		0.49	0.66	0.75
14	3	1	1	0.38	0.18	0.73	46	4	5		0.45	0.21	0.86
15	3	4	1	0.48	0.29	0.91	91	6	4	2	0.28	0.17	0.34
16	3	4	1	0.34	0.49	0.68	92	6	6	2	0.34	0.19	0.71
17	3	5		0.20	0.45	0.42	93	6	1	3	0.46	0.11	0.73
18	3	1	3	0.52	0.35	0.64	94	6	5		0.35	0.36	0.51
19	3	5		0.37	0.32	0.71	95	6	6	2	0.39	0.21	0.82
20	3	5		0.45	0.54	0.71	96	6	4	4	0.37	0.10	0.88
21	3	4	4	0.51	0.43	0.73	97	6	4	4	0.35	0.13	0.96
22	3	6	4	0.29	0.53	0.56	98	6	1	3	0.30	0.17	0.57
23	3	6	4	0.40	0.50	0.70	100	6	6	4	0.45	0.54	0.73
24	3	6	4	0.12	0.54	0.51	101	6	6	4	0.42	1.04	0.54
26	3	6	4	0.29	4.54	0.32	102	6	5		0.42	0.23	0.72
27	3	4	4	0.47	4.54	0.79	103	6	6	4	0.37	0.86	0.70
28	3	4	4	0.33	4.56	0.58	104	6	1	2	0.37	0.07	0.79
29	4	1	3	0.35	0.08	0.56	105	6	4	2	0.43	0.12	0.76
30	4	4	4	0.40	0.08	0.80	106	6	1	3	0.36	0.13	0.75
31	4	6	4	0.29	0.30	0.85	107	6	1	3	0.38	0.10	0.85
32	4	6	4	0.41	0.22	0.58	108	6	5		0.38	0.20	0.68
33	4	5		0.46	0.20	0.66	109	6	4	2	0.37	0.30	0.77
35	4	5		0.44	0.08	0.79	110	6	5		0.43	0.42	0.68
36	4	4	2	0.42	0.20	0.91	113	6	1	2	0.45	0.44	0.82
38	4	1	3	0.46	0.15	0.87	114	6	4	2	0.44	0.27	0.60
39	4	4	2	0.24	0.39	0.63	115	6	1	3	0.44	0.24	0.70
41	4	1	3	0.18	0.16	0.33	116	6	1	3	0.46	0.25	0.91

**Table 58. Constructed-Response Item Analyses, English Grade 07 Reading**

Mean Item-Total Corr.: 0.5 Mean p-Value: 0.5

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
4		3	1	1	0.62	11.82	15.08	25.81	46.33		0.96	0.69
5		3	1	1	0.38	9.48	28.05	61.96			0.51	0.76
6		3	5		0.43	32.60	41.62	21.84	3.12		0.82	0.32
11		3	5		0.50	14.42	21.86	61.75			1.97	0.73
12		3	6	1	0.53	21.84	49.77	27.11			1.27	0.52
13		3	6	1	0.57	18.50	15.71	64.38			1.41	0.72
25		3	6	4	0.55	10.20	54.71	22.02	6.92	3.89	2.26	0.34
34		4	1	2	0.44	43.40	38.79	16.71			1.10	0.36
37		4	1	2	0.41	12.58	65.50	20.84			1.08	0.54
40		4	4	2	0.45	33.07	44.49	20.94			1.49	0.43
90		6	1	2	0.51	46.24	21.08	14.30	17.04		1.34	0.34
99		6	1	4	0.52	14.35	28.73	29.65	18.88	6.84	1.55	0.43
111		6	4	2	0.58	39.52	39.82	18.71			1.95	0.39
112		6	4	2	0.45	33.49	55.57	9.52			1.42	0.37

**Table 59. Multiple-Choice Item Analyses, English Grade 07 Writing**

Mean Item-Total Corr.: 0.43 Mean p-Value: 0.7

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
48	5	3	7	0.38	0.05	0.79	69	5	2	5	0.53	0.18	0.70
49	5	3	8	0.45	0.15	0.51	70	5	2	5	0.33	0.29	0.67
50	5	3	7	0.37	0.39	0.89	71	5	3	7	0.38	0.44	0.58
51	5	3	7	0.47	2.41	0.85	72	5	3	7	0.52	0.52	0.73
52	5	3	7	0.50	2.84	0.75	73	5	3	7	0.37	0.72	0.75
53	5	3	8	0.38	0.12	0.64	74	5	3	7	0.34	0.62	0.45
54	5	3	8	0.29	0.36	0.59	75	5	3	7	0.31	0.70	0.51
55	5	2	7	0.49	0.19	0.85	76	5	3	7	0.39	0.38	0.43
56	5	3	7	0.43	0.26	0.88	77	5	3	7	0.37	0.26	0.60
57	5	3	7	0.47	0.26	0.81	78	5	2	5	0.31	0.50	0.53
58	5	2	5	0.47	0.23	0.82	79	5	2	5	0.41	0.25	0.49
59	5	2	8	0.43	0.28	0.50	80	5	3	7	0.48	0.24	0.91
60	5	2	8	0.48	0.20	0.79	81	5	3	7	0.36	0.27	0.68
61	5	2	5	0.44	0.23	0.75	82	5	3	8	0.37	0.72	0.63
62	5	3	8	0.43	0.31	0.73	83	5	3	8	0.54	0.98	0.68
63	5	2	7	0.26	0.31	0.78	84	5	3	8	0.52	0.81	0.88
64	5	2	7	0.41	0.29	0.53	85	5	3	7	0.58	0.38	0.79
65	5	2	5	0.40	0.17	0.72	86	5	3	7	0.52	1.58	0.77
66	5	2	7	0.43	0.56	0.49	87	5	2		0.48	0.48	0.89
67	5	3	8	0.43	0.74	0.89	88	5	2		0.54	0.57	0.75

**Table 60. Constructed-Response Item Analyses, English Grade 07 Writing**

Mean Item-Total Corr.: 0.42 Mean p-Value: 0.69

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
1		1	2	6	0.12	1.14	98.86				0.00	0.99
2	A	2	3	7	0.34	7.99	91.83				0.17	0.92
2	B	2	3	7	0.40	12.15	87.67				0.18	0.88
2	C	2	3	8	0.43	55.51	44.31				0.17	0.44
2	D	2	3	8	0.35	79.17	20.65				0.18	0.21
2	E	2	3	7	0.22	8.32	91.50				0.18	0.91
2	F	2	3	8	0.38	55.78	44.04				0.18	0.44
3	A	2	2	6	0.61	1.06	2.49	27.52	55.25	13.55	0.12	0.69
3	B	2	2	6	0.62	0.17	3.41	32.91	50.26	13.12	0.13	0.68
3	C	2	3	6	0.41	0.26	6.98	92.64			0.12	0.96
47		5	2	5	0.54	0.12	2.41	35.88	52.16	8.83	0.61	0.66
68		5	2	5	0.51	0.15	3.10	47.21	44.45	4.29	0.80	0.62
89		5	2	5	0.52	0.19	3.34	41.96	47.22	5.84	1.45	0.63

**Table 61. Multiple-Choice Item Analyses, English Grade 07 Mathematics**

Mean Item-Total Corr.: 0.38 Mean p-Value: 0.57

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
1	1	1	2	0.42	0.03	0.64	31	2	3		0.49	0.20	0.43
2	1	1	1	0.48	0.12	0.59	32	2	4	2	0.47	0.30	0.36
4	1	1		0.58	0.42	0.44	34	2	3		0.43	0.24	0.62
5	1	4		0.37	0.18	0.66	36	2	1	1	0.46	0.34	0.49
6	1	4	2	0.24	0.12	0.42	37	2	3		0.28	0.31	0.40
8	1	3		0.29	0.13	0.52	38	2	4		0.27	0.13	0.62
9	1	4		0.51	0.11	0.54	39	2	2		0.54	0.23	0.40
10	1	1		0.37	0.16	0.58	41	3	4		0.19	0.09	0.54
12	1	3		0.43	0.19	0.68	42	3	2		0.32	0.08	0.62
13	1	2		0.23	0.35	0.44	43	3	2		0.42	0.44	0.59
15	1	3		0.28	0.24	0.22	44	3	1		0.33	0.73	0.33
16	1	3		0.46	0.30	0.74	46	3	1		0.38	0.47	0.83
17	1	2		0.39	0.22	0.36	47	3	3		0.49	0.13	0.80
18	1	4	2	0.09	0.40	0.54	48	3	1		0.33	0.49	0.76
19	1	1	1	0.40	0.32	0.65	50	3	4		0.35	0.31	0.54
21	2	4	2	0.17	0.17	0.60	52	3	3		0.48	0.43	0.61
22	2	1	1	0.44	0.12	0.80	53	3	1		0.37	0.34	0.80
23	2	2		0.49	0.06	0.69	54	3	4		0.46	0.26	0.58
24	2	1	1	0.32	0.54	0.91	56	3	2		0.28	0.75	0.37
26	2	1		0.38	1.09	0.81	57	3	4	2	0.21	0.38	0.27
27	2	4		0.49	0.17	0.61	58	3	2		0.40	0.27	0.36
28	2	2		0.46	0.23	0.63	59	3	1		0.47	0.66	0.63
30	2	1		0.22	0.63	0.62							

**Table 62. Constructed-Response Item Analyses, English Grade 07 Mathematics**

Mean Item-Total Corr.: 0.63 Mean p-Value: 0.43

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
3		1	4	2	0.70	45.71	23.79	30.00			0.49	0.42
7		1	4	2	0.54	24.76	44.05	25.12	5.57		0.49	0.37
11		1	2		0.63	30.97	22.07	44.59			2.38	0.56
14		1	4	2	0.75	35.98	25.97	19.71	17.81		0.52	0.40
20		1	1	1	0.69	32.83	34.48	15.16	7.11	8.88	1.54	0.30
25		2	1		0.47	21.72	25.12	52.93			0.23	0.65
29		2	3	1	0.66	26.51	39.91	26.02	6.72		0.83	0.37
33		2	3		0.33	11.87	54.46	33.29			0.37	0.61
35		2	2		0.67	7.90	15.97	44.35	31.56		0.22	0.66
40		2	4	2	0.74	58.99	10.88	9.27	5.21	15.05	0.60	0.26
45		3	4	2	0.64	53.17	27.68	18.77			0.38	0.33
49		3	1		0.71	50.12	31.00	11.58	6.83		0.47	0.25
51		3	1	1	0.59	66.94	11.05	20.90			1.12	0.26
55		3	2		0.74	25.89	29.68	21.23	22.43		0.77	0.46
60		3	3		0.56	21.67	4.32	38.95	13.87	20.00	1.19	0.51

**Table 63. Multiple-Choice Item Analyses, English Grade 08 Reading**

Mean Item-Total Corr.: 0.36 Mean p-Value: 0.67

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
4	3	1	3	0.22	0.07	0.81	43	4	1	3	0.24	0.67	0.39
5	3	6	1	0.40	0.05	0.87	44	4	4	4	0.27	1.04	0.53
7	3	1	3	0.44	0.07	0.68	45	4	4	4	0.27	1.28	0.45
8	3	5		0.38	0.11	0.75	46	4	6	4	0.13	1.26	0.42
9	3	1	1	0.43	0.32	0.64	48	4	6	4	0.22	2.51	0.35
10	3	5		0.39	0.11	0.77	49	4	6	4	0.46	2.31	0.51
11	3	5		0.27	0.20	0.46	50	4	6	4	0.00	2.57	0.26
12	3	5		0.30	0.20	0.41	94	6	4	1	0.33	0.18	0.42
15	3	1	2	0.26	0.18	0.85	95	6	6	1	0.35	0.17	0.75
16	3	4	2	0.35	0.20	0.39	96	6	1	3	0.46	0.09	0.78
17	3	4	2	0.29	0.26	0.64	97	6	1	3	0.54	0.14	0.77
18	3	1	3	0.45	0.19	0.85	98	6	5		0.50	0.11	0.69
19	3	4	2	0.42	0.40	0.81	99	6	5		0.38	0.20	0.62
20	3	1	2	0.41	0.35	0.89	100	6	5		0.37	0.68	0.53
23	4	4	4	0.32	0.07	0.62	101	6	6	1	0.51	0.13	0.84
25	4	6	4	0.24	0.14	0.66	102	6	6	1	0.38	0.22	0.83
26	4	4	4	0.46	0.14	0.86	103	6	4	1	0.38	0.45	0.63
27	4	1	3	0.32	0.26	0.42	105	6	4	4	0.20	0.09	0.64
29	4	1	3	0.30	0.08	0.88	106	6	6	4	0.38	0.25	0.57
31	4	1	3	0.38	0.32	0.64	107	6	1	4	0.39	0.22	0.64
32	4	4	2	0.38	0.28	0.86	108	6	6	4	0.40	0.24	0.64
33	4	4	2	0.43	0.32	0.71	110	6	6	2	0.46	0.25	0.81
34	4	5		0.36	0.60	0.54	111	6	4	2	0.43	0.36	0.69
35	4	5		0.45	0.59	0.86	112	6	4	2	0.40	0.16	0.74
36	4	1	2	0.45	0.14	0.87	113	6	1	3	0.41	0.22	0.88
37	4	4	2	0.19	0.33	0.56	114	6	1	3	0.50	0.19	0.82
39	4	1	3	0.46	0.32	0.89	115	6	5		0.33	0.25	0.61
41	4	5		0.45	0.56	0.77	116	6	5		0.44	0.19	0.69

**Table 64. Constructed-Response Item Analyses, English Grade 08 Reading**

Mean Item-Total Corr.: 0.52 Mean p-Value: 0.49

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
6		3	1	1	0.49	33.64	37.56	27.95			0.85	0.47
13		3	1	2	0.50	7.71	47.25	29.89	14.15		1.00	0.50
14		3	1	2	0.44	4.51	13.96	80.66			0.86	0.88
22		4	4	4	0.52	16.14	48.93	33.94			0.99	0.58
24		4	6	4	0.51	41.99	37.91	14.69	2.96		2.45	0.25
28		4	5		0.51	10.81	15.68	33.96	37.54		2.01	0.65
30		4	5		0.60	38.88	9.70	46.30			5.13	0.51
38		4	1	2	0.47	41.65	38.37	17.63			2.36	0.37
40		4	4	2	0.62	17.69	37.45	27.55	15.16		2.16	0.46
42		4	1	2	0.39	14.94	63.09	19.06			2.90	0.51
47		4	6	4	0.52	37.52	37.36	12.14	7.16		5.81	0.28
93		6	1	1	0.52	39.49	22.20	14.66	22.15		1.51	0.39
104		6	6	4	0.56	32.57	52.20	11.65			3.58	0.38
109		6	5		0.66	12.95	15.32	23.46	45.76		2.51	0.67

**Table 65. Multiple-Choice Item Analyses, English Grade 08 Writing**

Mean Item-Total Corr.: 0.42 Mean p-Value: 0.68

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
51	5	3	8	0.49	0.04	0.77	71	5	3	8	0.22	8.98	0.59
52	5	3	8	0.43	0.10	0.61	72	5	2	7	0.45	0.22	0.90
53	5	3	8	0.38	0.22	0.62	73	5	3	8	0.40	0.22	0.78
54	5	3	7	0.43	0.22	0.81	75	5	3	7	0.44	0.21	0.83
55	5	3	7	0.40	0.32	0.75	76	5	2	7	0.44	0.32	0.54
56	5	3	7	0.24	0.58	0.32	77	5	3	8	0.43	0.27	0.72
57	5	3	7	0.50	0.29	0.85	78	5	2	5	0.49	0.21	0.81
58	5	3	7	0.45	5.03	0.82	79	5	2	5	0.53	0.34	0.75
59	5	2	8	0.48	0.20	0.58	80	5	2	5	0.23	0.83	0.35
60	5	2	8	0.46	0.36	0.81	81	5	2	5	0.40	0.41	0.71
61	5	3	7	0.43	0.46	0.53	82	5	3	8	0.43	0.48	0.49
62	5	3	7	0.40	0.30	0.83	83	5	3	7	0.35	0.98	0.67
63	5	3	7	0.52	0.45	0.78	84	5	2	5	0.42	0.38	0.82
64	5	3	7	0.42	0.52	0.69	85	5	3	8	0.44	0.52	0.69
65	5	3	7	0.40	0.32	0.75	86	5	2	5	0.44	0.41	0.73
66	5	3	7	0.42	0.19	0.87	87	5	3	8	0.55	0.57	0.84
67	5	3	8	0.40	0.13	0.28	88	5	2	5	0.41	0.44	0.55
68	5	3	8	0.43	0.21	0.83	89	5	2	5	0.42	0.63	0.60
69	5	3	8	0.45	0.18	0.78	90	5	2	5	0.28	0.61	0.37
70	5	2	7	0.48	0.13	0.87	91	5	2	5	0.35	0.46	0.47

**Table 66. Constructed-Response Item Analyses, English Grade 08 Writing**

Mean Item-Total Corr.: 0.45 Mean p-Value: 0.74

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
1		1	2	6	0.11	0.80	99.20				0.00	0.99
2	A	2	3	8	0.32	21.65	78.26				0.09	0.78
2	B	2	3	7	0.46	18.50	81.41				0.09	0.81
2	C	2	3	7	0.41	26.58	73.33				0.09	0.73
2	D	2	3	8	0.31	24.40	75.50				0.10	0.75
2	E	2	3	8	0.48	33.91	66.00				0.09	0.66
2	F	2	3	7	0.44	37.98	61.92				0.10	0.62
3	A	2	2	6	0.64	1.32	2.80	22.01	48.50	25.24	0.12	0.73
3	B	2	2	6	0.68	0.11	3.07	24.65	46.00	26.06	0.12	0.74
3	C	2	3	6	0.41	0.17	5.25	94.47			0.11	0.97
21		5	2	5	0.56	0.13	2.58	36.40	49.77	9.92	1.22	0.66
74		5	2	5	0.52	0.13	2.27	43.66	46.85	6.17	0.91	0.64
92		5	2	5	0.52	0.22	3.07	52.42	36.74	5.49	2.07	0.60



**Table 67. Multiple-Choice Item Analyses, English Grade 08 Mathematics**

Mean Item-Total Corr.: 0.39 Mean p-Value: 0.54

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
1	1	2		0.45	0.06	0.77	32	2	4	2	0.33	0.14	0.62
2	1	4		0.20	0.22	0.45	33	2	1		0.49	0.43	0.37
3	1	1		0.42	0.30	0.83	35	2	3		0.36	0.27	0.48
5	1	3		0.45	0.29	0.37	36	2	3		0.32	0.19	0.57
6	1	2		0.45	0.40	0.60	37	2	3		0.43	0.33	0.62
7	1	1	2	0.46	0.21	0.75	38	2	1		0.52	0.21	0.45
9	1	3		0.51	0.33	0.65	39	2	1		0.34	0.27	0.45
10	1	4		0.33	0.17	0.62	41	3	4		0.35	0.08	0.48
11	1	4	3	0.50	0.19	0.67	42	3	2		0.56	0.22	0.40
12	1	3		0.40	0.42	0.43	43	3	4		0.43	0.16	0.54
14	1	2	1	0.34	0.59	0.48	45	3	2		0.35	0.43	0.42
15	1	1		0.12	1.00	0.31	46	3	3		0.44	0.15	0.78
16	1	2	1	0.40	0.54	0.36	47	3	4		0.39	0.32	0.49
18	1	4	2	0.44	1.11	0.30	49	3	2	1	0.60	0.29	0.52
19	1	3		0.34	1.23	0.33	50	3	4	2	0.18	0.22	0.83
21	2	2	1	0.39	0.07	0.49	52	3	4	2	0.25	0.10	0.56
22	2	4		0.20	0.26	0.47	53	3	1		0.36	0.33	0.40
23	2	2	1	0.48	0.22	0.47	54	3	4		0.43	0.25	0.69
25	2	4	2	0.35	0.11	0.49	56	3	1		0.57	0.46	0.51
27	2	4		0.29	0.15	0.69	57	3	3	2	0.34	0.37	0.44
28	2	2	1	0.24	0.26	0.79	58	3	2	1	0.41	0.31	0.37
29	2	1		0.43	0.33	0.75	59	3	1	2	0.46	0.65	0.67
31	2	1		0.35	0.38	0.44							

**Table 68. Constructed-Response Item Analyses, English Grade 08 Mathematics**

Mean Item-Total Corr.: 0.60 Mean p-Value: 0.45

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
4		1	2	1	0.51	6.45	19.52	35.74	38.15		0.14	0.68
8		1	2	1	0.61	25.36	21.01	50.79			2.85	0.61
13		1	4	3	0.58	43.12	28.11	25.56	1.82		1.39	0.28
17		1	1		0.52	75.68	4.08	16.01			4.23	0.18
20		1	1	2	0.70	29.17	33.89	13.07	8.03	11.67	4.16	0.33
24		2	2	1	0.64	23.36	55.27	20.83			0.55	0.48
26		2	4		0.60	51.05	26.32	18.96	2.39		1.28	0.24
30		2	4	3	0.50	61.87	27.71	9.20			1.22	0.23
34		2	3		0.70	25.47	15.24	35.41	22.88		0.99	0.52
40		2	2	1	0.62	3.51	8.08	51.89	24.21	12.02	0.29	0.58
44		3	3		0.35	7.38	46.28	46.00			0.34	0.69
48		3	3		0.61	12.22	17.64	44.85	24.76		0.53	0.61
51		3	1		0.66	47.74	21.89	29.29			1.08	0.40
55		3	1	2	0.64	31.88	30.04	28.28	8.81		0.99	0.38
60		3	4	3	0.70	31.25	6.92	21.29	9.53	29.89	1.11	0.49

**Table 69. Multiple-Choice Item Analyses, English Grade 08 Science**

Mean Item-Total Corr.: 0.34 Mean p-Value: 0.51

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
1	1	1		0.48	0.03	0.63	44	2	1	2	0.52	0.12	0.70
2	1	1	1	0.26	0.04	0.51	45	2	4		0.38	0.19	0.47
3	1	3		0.29	0.23	0.52	46	2	2	3	0.31	0.14	0.63
5	1	2	3	0.34	0.09	0.51	48	2	1	1	0.34	0.21	0.61
6	1	3	5	0.30	0.13	0.49	49	2	1	2	0.57	0.09	0.50
7	1	1	1	0.41	0.07	0.44	51	2	2		0.47	0.19	0.44
8	1	1	2	0.35	0.06	0.60	52	2	4	6	0.30	0.29	0.57
9	1	1	2	0.44	0.10	0.52	53	2	4		0.19	0.22	0.55
10	1	3		0.31	0.06	0.36	54	2	3	5	0.35	0.13	0.62
12	1	2		0.32	0.13	0.53	55	2	1	1	0.37	0.12	0.59
13	1	1	1	0.28	0.29	0.49	56	3	4	6	0.28	0.08	0.75
15	1	4		0.37	0.10	0.34	57	3	2		0.35	0.13	0.62
16	1	2	3	0.25	0.28	0.54	59	3	2		0.29	0.14	0.44
17	1	3	5	0.37	0.11	0.67	60	3	4	6	0.34	0.42	0.52
18	1	1	1	0.45	0.08	0.46	61	3	4	6	0.28	0.25	0.72
19	1	1	2	0.46	0.04	0.63	62	3	1	1	0.21	0.29	0.33
27	2	2		0.22	0.11	0.36	64	3	1	1	0.45	0.09	0.44
28	2	2		0.41	0.11	0.61	65	3	3	5	0.31	0.69	0.38
29	2	2	3	0.33	0.11	0.51	67	3	1	1	0.41	0.25	0.50
30	2	1		0.49	0.30	0.79	68	3	1	2	0.42	0.13	0.79
31	2	2	3	0.19	0.35	0.36	69	3	4	6	0.40	1.57	0.57
32	2	1	2	0.24	0.62	0.60	72	3	1	1	0.42	0.23	0.45
34	2	4		0.31	0.16	0.51	74	3	3	5	0.29	0.28	0.39
35	2	3		0.17	0.08	0.33	75	3	1	2	0.21	0.23	0.59
36	2	4		0.33	0.17	0.24	76	3	2	3	0.44	0.53	0.41
38	2	2		0.46	0.13	0.47	78	3	3	5	0.28	0.18	0.45
39	2	3	5	0.35	0.18	0.50	79	3	2	3	0.21	0.18	0.51
40	2	3	5	0.20	0.17	0.23	80	3	1	2	0.36	0.12	0.33
41	2	4	6	0.16	0.47	0.28	81	3	1		0.42	0.28	0.52
42	2	1	1	0.48	0.33	0.62	83	3	3		0.25	0.81	0.48

**Table 70. Constructed-Response Item Analyses, English Grade 08 Science**

Mean Item-Total Corr.: 0.46 Mean p-Value: 0.43

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
4		1	1	1	0.20	68.33	30.78				0.89	0.31
11		1	1	2	0.42	64.00	34.74				1.26	0.35
14		1	2	3	0.48	43.22	56.27				0.51	0.56
20		1	1	1	0.51	51.13	48.28				0.59	0.48
21		1	1	1	0.38	34.72	64.85				0.43	0.65
22		1	1	1	0.55	25.62	30.63	42.73			1.02	0.58
23		1	1	1	0.41	34.46	64.56				0.98	0.65
24		1	1	2	0.58	22.61	15.91	15.52	22.86	22.33	0.77	0.51
25		1	1	2	0.66	22.58	27.42	48.13			1.87	0.62
26		2	3	5	0.46	17.42	26.10	56.06			0.42	0.69
33		2	4	6	0.49	46.74	49.58	2.33			1.35	0.27
37		2	1	1	0.70	11.85	19.03	32.65	35.75		0.72	0.64
43		2	4	6	0.34	51.24	42.11	3.76			2.89	0.25
47		2	3	5	0.28	89.97	9.22				0.80	0.09
50		2	4		0.52	34.11	48.30	15.71			1.88	0.40
58		3	2	3	0.28	72.45	19.12				8.44	0.19
63		3	2	3	0.30	58.86	23.77	15.25			2.11	0.27
66		3	3	5	0.54	52.79	44.16				3.06	0.44
70		3	3		0.64	38.22	36.43	24.63			0.72	0.43
71		3	2	3	0.53	47.57	32.90	15.73			3.80	0.32
73		3	4	6	0.31	48.72	39.08	5.52			6.68	0.25
77		3	3		0.58	22.94	40.69	35.30			1.07	0.56
82		3	4		0.53	36.50	49.18	10.44			3.89	0.35

**Table 71. Multiple-Choice Item Analyses, English Grade 09 Reading**

Mean Item-Total Corr.: 0.38 Mean p-Value: 0.68

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
5	3	4	2	0.23	0.14	0.65	37	4	5		0.35	0.13	0.41
6	3	4	2	0.39	0.17	0.48	38	4	5		0.25	0.13	0.44
8	3	4	2	0.38	0.41	0.85	39	4	5		0.40	0.15	0.64
9	3	1	2	0.37	0.11	0.92	40	4	5		0.30	0.25	0.47
10	3	1	3	0.35	0.10	0.83	41	4	5		0.38	0.15	0.85
11	3	1	3	0.14	0.19	0.19	44	4	1	3	0.43	0.92	0.77
12	3	1	3	0.05	0.10	0.18	45	4	4	2	0.54	0.94	0.86
13	3	6	1	0.31	0.13	0.68	46	4	6	2	0.51	1.07	0.65
14	3	5		0.42	0.08	0.57	89	6	1	3	0.31	0.13	0.68
15	3	6	1	0.28	0.20	0.57	91	6	1	3	0.41	0.09	0.90
16	3	4	1	0.45	0.18	0.73	92	6	4	2	0.38	0.22	0.69
17	3	6	1	0.40	0.23	0.79	93	6	4	2	0.23	0.49	0.48
18	3	5		0.54	0.35	0.71	95	6	5		0.32	0.10	0.97
20	3	6	4	0.53	0.17	0.81	96	6	5		0.36	0.15	0.97
21	3	1	4	0.47	0.27	0.77	97	6	5		0.38	0.17	0.96
22	3	1	3	0.53	0.18	0.86	99	6	1	3	0.48	1.32	0.86
23	3	5		0.39	0.21	0.59	101	6	4	1	0.41	0.26	0.67
24	3	5		0.49	0.23	0.80	102	6	1	1	0.42	0.38	0.83
26	4	4	4	0.49	0.04	0.79	104	6	1	1	0.38	0.93	0.64
27	4	4	4	0.23	0.09	0.58	105	6	5		0.53	0.26	0.89
28	4	6	4	0.13	0.12	0.44	106	6	5		0.52	0.37	0.76
30	4	6	4	0.45	0.14	0.64	107	6	5		0.50	0.55	0.77
31	4	6	4	-0.04	0.18	0.28	108	6	1	3	0.38	2.56	0.77
32	4	6	4	0.28	0.23	0.41	109	6	1	3	0.41	0.58	0.70
33	4	4	4	0.41	0.23	0.70	110	6	5		0.36	0.55	0.53
34	4	5		0.32	0.32	0.52	111	6	4	1	0.40	1.14	0.61
35	4	1	2	0.40	0.12	0.63	113	6	4	1	0.42	1.11	0.82
36	4	1	3	0.38	0.29	0.65	114	6	5		0.50	1.03	0.77

**Table 72. Constructed-Response Item Analyses, English Grade 09 Reading**

Mean Item-Total Corr.: 0.56 Mean p-Value: 0.52

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
4		3	1	2	0.46	7.95	46.90	28.67	15.50		0.99	0.50
7		3	1	2	0.42	3.99	12.88	81.95			1.18	0.88
19		3	1	4	0.55	26.52	21.40	23.39	25.92		2.78	0.49
29		4	6	4	0.56	30.16	41.15	10.95	14.42		3.34	0.35
42		4	4	2	0.63	21.92	12.48	29.82	32.17		3.62	0.56
43		4	1	2	0.58	5.02	22.09	48.91	20.55		3.43	0.61
90		6	1	2	0.63	27.49	20.63	27.09	19.46		5.34	0.44
94		6	4	2	0.62	10.30	22.41	41.15	22.47		3.67	0.57
98		6	5		0.68	19.97	9.01	27.82	38.27		4.93	0.60
100		6	6	1	0.58	17.55	35.58	29.28	12.21		5.38	0.44
103		6	4	1	0.39	28.94	46.21	20.96			3.89	0.44
112		6	6	1	0.56	18.54	30.59	36.02	8.47		6.38	0.43
115		6	6	1	0.66	18.65	35.75	28.99	9.34		7.27	0.41
116		6	1	1	0.58	22.14	43.27	27.27			7.31	0.49

**Table 73. Multiple-Choice Item Analyses, English Grade 09 Writing**

Mean Item-Total Corr.: 0.41 Mean p-Value: 0.67

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
47	5	3	7	0.42	0.06	0.92	67	5	2	5	0.21	0.18	0.47
48	5	3	7	0.34	0.16	0.76	69	5	3	7	0.48	0.18	0.84
49	5	2	7	0.44	0.20	0.56	70	5	2	8	0.40	0.27	0.42
50	5	2	7	0.30	0.10	0.64	71	5	3	7	0.49	0.91	0.68
51	5	2	7	0.51	0.08	0.80	72	5	3	7	0.39	0.22	0.80
52	5	2	7	0.44	0.21	0.54	73	5	3	7	0.49	0.42	0.83
53	5	2	7	0.33	0.23	0.71	74	5	3	8	0.49	0.47	0.78
54	5	3	8	0.44	0.31	0.77	75	5	3	7	0.42	0.38	0.42
55	5	3	8	0.19	0.15	0.71	76	5	2	7	0.50	0.32	0.81
56	5	3	7	0.53	0.31	0.64	77	5	2	5	0.47	0.26	0.87
57	5	3	8	0.30	6.15	0.40	78	5	3	8	0.30	0.26	0.54
58	5	3	8	0.39	6.91	0.59	79	5	3	7	0.32	0.42	0.57
59	5	3	8	0.43	0.73	0.79	80	5	2	5	0.44	0.26	0.75
60	5	3	8	0.50	0.16	0.84	81	5	2	5	0.25	0.21	0.75
61	5	3	7	0.44	0.30	0.68	82	5	3	8	0.43	0.31	0.32
62	5	3	7	0.38	0.43	0.67	83	5	3	8	0.44	0.55	0.75
63	5	3	7	0.37	0.42	0.53	84	5	3	8	0.52	0.26	0.80
64	5	2	5	0.30	0.18	0.39	85	5	3	7	0.49	0.44	0.73
65	5	2	5	0.39	0.19	0.52	86	5	3	8	0.49	0.63	0.65
66	5	2	5	0.44	0.18	0.77	87	5	2	8	0.56	0.39	0.66

**Table 74. Constructed-Response Item Analyses, English Grade 09 Writing**

Mean Item-Total Corr.: 0.47 Mean p-Value: 0.66

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
1		1	2	6	0.15	1.52	98.48				0.00	0.98
2	A	2	3	8	0.44	18.89	80.96				0.15	0.81
2	B	2	3	7	0.52	37.44	62.41				0.15	0.62
2	C	2	3	7	0.22	48.01	51.83				0.16	0.52
2	D	2	3	8	0.33	77.00	22.85				0.16	0.23
2	E	2	3	7	0.51	34.34	65.50				0.15	0.66
2	F	2	3	8	0.45	46.56	53.28				0.16	0.53
3	A	2	2	6	0.69	0.92	3.63	27.71	40.58	26.88	0.28	0.72
3	B	2	2	6	0.70	0.15	4.56	31.47	39.80	23.74	0.28	0.70
3	C	2	3	6	0.41	0.24	6.26	93.22			0.27	0.96
25		5	2	5	0.56	0.12	3.29	41.55	44.05	9.13	1.86	0.64
68		5	2	5	0.57	0.13	3.34	40.51	47.57	7.15	1.32	0.64
88		5	2	5	0.52	0.47	4.25	37.99	45.85	8.68	2.76	0.63

**Table 75. Multiple-Choice Item Analyses, English Grade 09 Mathematics**

Mean Item-Total Corr.: 0.36 Mean p-Value: 0.51

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
1	1	2		0.27	0.04	0.91	31	2	1		0.40	0.79	0.48
2	1	4		0.39	0.29	0.50	33	2	3		0.31	0.18	0.63
4	1	1		0.28	0.42	0.46	34	2	1		0.36	0.34	0.45
5	1	4		0.40	0.27	0.23	36	2	4	2	0.42	0.23	0.53
6	1	2		0.44	0.35	0.61	37	2	2		0.39	0.19	0.83
7	1	2	1	0.41	0.10	0.72	38	2	2		0.23	0.46	0.68
9	1	3		0.50	0.33	0.63	39	2	4		0.51	0.44	0.39
10	1	4	2	0.47	0.26	0.38	41	3	3		0.41	0.16	0.59
12	1	1		0.48	0.53	0.41	42	3	4	2	0.25	0.18	0.58
13	1	2		0.45	0.23	0.54	44	3	1		0.38	0.28	0.72
15	1	3		0.15	0.54	0.38	45	3	2		0.34	0.26	0.08
16	1	4		0.23	0.37	0.60	47	3	3	2	0.39	0.32	0.66
17	1	2		0.27	0.59	0.38	48	3	1		0.25	0.36	0.53
18	1	3		0.38	0.51	0.41	49	3	2		0.22	0.34	0.48
19	1	4	2	0.49	0.74	0.34	51	3	3		0.35	0.28	0.39
21	2	3		0.39	0.23	0.44	52	3	3		0.42	0.28	0.68
22	2	2	1	0.54	0.09	0.61	53	3	2		0.39	0.33	0.31
24	2	3		0.46	0.23	0.39	55	3	1		0.30	0.51	0.36
25	2	4		0.42	0.16	0.21	56	3	3		0.38	0.42	0.73
27	2	2		0.31	0.44	0.14	57	3	4		0.15	0.37	0.38
28	2	1	2	0.43	0.35	0.63	58	3	3		0.33	0.33	0.85
29	2	1		0.20	0.53	0.34	59	3	4		0.18	0.47	0.50
30	2	1	2	0.39	0.40	0.70							

**Table 76. Constructed-Response Item Analyses, English Grade 09 Mathematics**

Mean Item-Total Corr.: 0.65 Mean p-Value: 0.34

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
3		1	4	2	0.67	39.63	26.79	32.68			0.90	0.46
8		1	2		0.73	47.70	16.31	5.50	26.86		3.63	0.36
11		1	1	2	0.67	42.60	26.79	29.50			1.11	0.43
14		1	4		0.66	66.36	17.19	6.86	4.80		4.79	0.15
20		1	2	1	0.74	15.53	21.86	23.04	22.61	15.77	1.20	0.50
23		2	2	1	0.64	23.24	51.06	24.72			0.98	0.50
26		2	4		0.65	43.57	28.01	23.04	3.36		2.01	0.28
32		2	1		0.65	53.91	26.31	15.81			3.96	0.29
35		2	2	1	0.61	27.96	27.46	18.72	24.73		1.13	0.46
40		2	4	2	0.70	70.99	9.69	5.73	4.63	6.69	2.28	0.15
43		3	2	1	0.55	66.52	23.81	3.97			5.70	0.16
46		3	1	2	0.68	51.39	30.56	3.82	12.29		1.94	0.25
50		3	3		0.55	32.65	45.54	20.24			1.57	0.43
54		3	3		0.56	26.39	53.02	11.48	7.06		2.05	0.32
60		3	3	1	0.64	24.47	45.67	16.25	8.18	3.22	2.20	0.29

**Table 77. Multiple-Choice Item Analyses, English Grade 10 Reading**

Mean Item-Total Corr.: 0.37 Mean p-Value: 0.67

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
4	3	1	3	0.40	0.11	0.54	39	4	1	3	0.38	0.22	0.79
6	3	6	1	0.29	0.21	0.55	40	4	6	4	0.48	0.26	0.74
7	3	1	1	0.38	0.08	0.80	41	4	6	4	0.31	0.86	0.56
8	3	4	1	0.14	0.25	0.47	42	4	5		0.36	0.42	0.94
9	3	1	3	0.27	0.10	0.71	43	4	5		0.44	0.56	0.60
10	3	1	3	0.43	0.10	0.89	45	4	5		0.50	0.95	0.77
12	3	4	4	0.28	0.13	0.47	46	4	1	3	0.45	1.59	0.58
13	3	4	4	0.27	0.25	0.66	48	4	6	2	0.52	2.12	0.65
14	3	1	3	0.27	0.08	0.62	49	4	4	2	0.28	2.81	0.41
15	3	5		0.30	0.17	0.47	50	4	5		0.42	2.49	0.74
16	3	5		0.38	0.12	0.85	52	4	5		0.44	3.74	0.70
17	3	5		0.21	0.19	0.41	53	4	5		0.40	4.01	0.80
18	3	5		0.31	0.43	0.47	97	6	1	1	0.44	0.14	0.86
19	3	4	4	0.34	0.85	0.50	98	6	4	1	0.38	0.45	0.71
20	3	6	4	0.43	1.77	0.56	99	6	4	1	0.27	0.13	0.88
21	3	1	3	0.25	0.12	0.45	100	6	1	1	0.43	0.18	0.89
22	3	5		0.39	0.40	0.78	102	6	1	1	0.41	0.18	0.65
23	3	5		0.38	0.27	0.81	103	6	5		0.52	0.18	0.91
24	3	5		0.36	0.36	0.54	104	6	1	3	0.39	0.48	0.80
25	3	5		0.43	0.31	0.63	105	6	4	1	0.39	0.22	0.72
26	4	4	2	0.37	0.24	0.75	106	6	5		0.46	0.26	0.78
27	4	4	2	0.45	0.21	0.75	107	6	1	3	0.28	0.33	0.43
30	4	6	2	0.19	0.28	0.53	109	6	1	3	0.41	0.34	0.77
32	4	1	3	0.24	0.13	0.50	110	6	1	3	0.38	0.66	0.79
33	4	5		0.21	0.17	0.29	111	6	5		0.52	0.25	0.79
35	4	4	2	0.45	0.34	0.74	113	6	1	3	0.43	0.45	0.74
37	4	6	4	0.45	0.34	0.82	114	6	4	1	0.41	0.45	0.65
38	4	6	4	0.32	0.21	0.64	115	6	4	1	0.45	0.52	0.83



**Table 78. Constructed-Response Item Analyses, English Grade 10 Reading**

Mean Item-Total Corr.: 0.57 Mean p-Value: 0.49

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
5		3	1	1	0.61	5.44	11.71	21.46	28.21	31.03	2.16	0.66
11		3	6	4	0.47	8.90	38.90	49.61			2.58	0.69
28		4	1	2	0.53	11.93	30.93	32.58	22.48		2.09	0.55
29		4	6	2	0.61	20.21	34.93	29.92	11.25		3.68	0.43
31		4	4	2	0.56	35.01	33.68	19.60	7.75		3.96	0.32
34		4	4	2	0.57	24.96	38.88	21.41	7.13		7.62	0.34
36		4	6	4	0.53	18.78	63.86	13.62			3.73	0.46
44		4	1	2	0.70	15.51	20.30	21.57	37.22		5.39	0.58
47		4	5		0.60	11.59	13.99	28.53	36.11		9.78	0.60
51		4	1	2	0.58	28.97	30.56	11.05	15.82		13.6	0.33
96		6	6	1	0.59	13.39	34.25	32.95	15.36		4.05	0.49
101		6	4	1	0.35	29.84	48.63	18.34			3.20	0.43
108		6	1	1	0.65	18.68	25.99	27.40	22.84		5.10	0.50
112		6	6	1	0.60	14.30	29.95	37.91	12.52		5.32	0.48

**Table 79. Multiple-Choice Item Analyses, English Grade 10 Writing**

Mean Item-Total Corr.: 0.46 Mean p-Value: 0.73

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
54	5	3	7	0.45	0.05	0.95	75	5	3	7	0.56	0.39	0.89
55	5	3	8	0.36	0.10	0.58	76	5	3	8	0.37	0.35	0.54
56	5	2		0.39	0.31	0.87	77	5	3	8	0.25	0.28	0.51
57	5	3	8	0.48	0.06	0.77	78	5	2	8	0.37	0.38	0.45
58	5	3	8	0.40	1.80	0.58	79	5	2	8	0.51	1.00	0.85
59	5	3	7	0.55	0.38	0.87	80	5	3	8	0.47	0.30	0.87
60	5	3	7	0.53	0.12	0.85	81	5	2	7	0.56	0.42	0.82
61	5	3	7	0.56	0.16	0.90	82	5	3	7	0.48	0.42	0.66
62	5	3	8	0.52	0.16	0.85	83	5	3	7	0.41	0.32	0.64
63	5	2	5	0.42	0.09	0.82	84	5	3	7	0.44	0.63	0.65
64	5	2	5	0.21	0.13	0.50	85	5	3	7	0.53	0.53	0.91
65	5	3	7	0.59	0.16	0.74	86	5	2	7	0.53	0.35	0.80
66	5	3	7	0.55	4.84	0.65	87	5	2	5	0.35	0.36	0.44
67	5	2	5	0.27	0.33	0.56	88	5	2		0.43	0.38	0.83
68	5	2	5	0.54	0.29	0.85	89	5	3	8	0.54	0.66	0.82
69	5	2	5	0.38	0.20	0.64	90	5	2		0.37	0.54	0.52
70	5	2	5	0.44	0.17	0.74	91	5	3	7	0.32	0.61	0.44
71	5	2	5	0.47	0.10	0.88	92	5	3	7	0.53	0.39	0.80
73	5	3	7	0.59	0.23	0.83	93	5	3	7	0.43	0.53	0.78
74	5	3	7	0.53	0.36	0.75	94	5	3	7	0.52	0.48	0.84

**Table 80. Constructed-Response Item Analyses, English Grade 10 Writing**

Mean Item-Total Corr.: 0.46 Mean p-Value: 0.71

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
1		1	2	6	0.18	1.99	98.01				0.00	0.98
2	A	2	3	7	0.46	10.00	89.82				0.18	0.90
2	B	2	3	7	0.43	22.83	76.97				0.20	0.77
2	C	2	3	8	0.40	50.90	48.92				0.18	0.49
2	D	2	3	8	0.37	17.74	82.07				0.18	0.82
2	E	2	3	8	0.30	84.04	15.67				0.29	0.16
2	F	2	3	8	0.41	16.28	83.54				0.18	0.84
3	A	2	2	6	0.67	1.14	4.16	32.98	39.69	21.61	0.42	0.69
3	B	2	2	6	0.68	0.25	3.99	34.29	39.54	21.50	0.43	0.69
3	C	2	3	6	0.41	0.30	5.71	93.56			0.44	0.96
72		5	2	5	0.55	0.38	4.19	42.07	41.41	9.80	2.15	0.63
95		5	2	5	0.61	0.73	4.64	44.80	38.99	7.43	3.41	0.60
116		5	2	5	0.54	0.51	4.09	34.12	48.66	9.74	2.88	0.64

**Table 81. Multiple-Choice Item Analyses, English Grade 10 Mathematics**

Mean Item-Total Corr.: 0.33 Mean p-Value: 0.44

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
1	1	1		0.20	0.05	0.63	31	2	3		0.25	0.21	0.29
2	1	2	1	0.38	0.07	0.24	33	2	3	2	0.18	0.32	0.38
3	1	2		0.31	0.16	0.24	34	2	4		0.48	0.37	0.33
5	1	1		0.33	0.23	0.38	35	2	1		0.43	0.22	0.49
6	1	2		0.30	0.14	0.44	37	2	1		0.33	0.36	0.36
7	1	3		0.30	0.22	0.42	38	2	4		0.44	0.23	0.33
8	1	1		0.28	0.22	0.32	39	2	2	1	0.48	0.19	0.42
10	1	1		0.48	0.15	0.52	41	3	1		0.38	0.47	0.22
11	1	4		-0.01	0.25	0.27	42	3	3	2	0.38	0.07	0.69
12	1	3	2	0.00	0.24	0.19	43	3	2		0.28	0.23	0.38
13	1	4		0.46	0.28	0.29	44	3	3	2	0.32	0.16	0.29
15	1	1		0.24	0.37	0.37	46	3	3	2	0.27	0.24	0.88
16	1	4		0.42	0.14	0.56	47	3	4		0.58	0.53	0.34
17	1	2	1	0.44	0.25	0.73	49	3	4		0.22	0.56	0.41
19	1	2	1	0.43	0.18	0.63	50	3	4		0.22	0.37	0.51
21	2	4		0.40	0.10	0.30	51	3	1		0.49	0.30	0.64
22	2	3		0.36	0.08	0.70	53	3	2		0.33	0.32	0.51
23	2	2	1	0.37	0.11	0.27	54	3	3		0.42	0.27	0.48
24	2	4		0.43	0.48	0.24	55	3	2		0.27	0.44	0.33
26	2	1		0.42	0.25	0.64	56	3	4		0.19	0.36	0.42
27	2	2		0.28	0.16	0.79	58	3	1		0.32	0.60	0.32
29	2	3	2	0.10	0.45	0.42	59	3	2		0.37	0.46	0.62
30	2	3	2	0.42	0.22	0.65							

**Table 82. Constructed-Response Item Analyses, English Grade 10 Mathematics**

Mean Item-Total Corr.: 0.61 Mean p-Value: 0.35

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
4		1	2		0.50	22.58	11.86	64.39			1.17	0.70
9		1	2	1	0.61	43.39	11.87	35.96	7.99		0.78	0.36
14		1	3	2	0.21	93.56	2.85	2.02			1.57	0.03
18		1	4		0.56	57.80	30.71	7.92	2.29		1.28	0.18
20		1	4		0.67	70.00	9.90	4.36	7.90	6.43	1.41	0.17
25		2	4		0.65	35.53	26.30	37.00			1.16	0.50
28		2	3		0.60	20.65	44.56	30.43	3.25		1.11	0.38
32		2	1		0.54	37.22	54.83	6.33			1.62	0.34
36		2	2		0.73	47.38	15.29	4.88	28.44		4.00	0.37
40		2	2	1	0.75	39.80	22.59	12.13	9.83	13.70	1.95	0.33
45		3	3	2	0.49	57.35	17.69	23.67			1.29	0.33
48		3	4		0.72	29.64	10.76	17.97	40.32		1.31	0.56
52		3	2		0.68	63.17	6.17	25.98			4.68	0.29
57		3	1		0.69	49.22	29.88	3.59	14.51		2.80	0.27
60		3	3	1	0.68	10.67	37.79	33.90	14.05	1.87	1.71	0.39

**Table 83. Multiple-Choice Item Analyses, English Grade 10 Science**

Mean Item-Total Corr.: 0.33 Mean p-Value: 0.54

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
1	1	3		0.26	0.05	0.76	45	2	1		0.23	0.11	0.30
2	1	2	4	0.15	0.04	0.33	46	2	1	1	0.26	0.29	0.53
3	1	3	5	0.24	0.35	0.25	47	2	2		0.22	0.17	0.35
4	1	3		0.26	0.04	0.38	48	2	4		0.43	0.19	0.62
5	1	3	5	0.27	0.13	0.55	49	2	1	1	0.26	0.38	0.36
7	1	1	2	0.42	0.08	0.70	51	2	2	4	0.51	0.44	0.56
8	1	2		0.49	0.12	0.60	52	2	1	1	0.43	0.30	0.81
9	1	2	4	0.26	0.12	0.40	54	2	1		0.35	0.40	0.52
10	1	3		0.27	0.13	0.54	55	3	4	6	0.47	0.06	0.79
11	1	2		0.26	0.12	0.35	56	3	3		0.33	0.04	0.63
12	1	3		0.29	0.22	0.66	57	3	1	1	0.39	0.07	0.42
13	1	1	1	0.30	0.19	0.47	58	3	1	2	0.44	0.09	0.64
14	1	4		0.29	0.08	0.36	59	3	3		0.37	0.37	0.45
15	1	4	6	0.15	0.12	0.33	60	3	3	5	0.28	0.31	0.39
16	1	1	1	0.32	0.11	0.63	62	3	1		0.40	0.22	0.71
17	1	4	6	0.31	0.21	0.54	63	3	1		0.47	0.24	0.71
18	1	1	2	0.53	0.14	0.70	64	3	1		0.30	0.35	0.38
19	1	4	6	0.20	0.14	0.54	66	3	1	2	0.43	0.17	0.76
20	1	3		0.20	0.05	0.29	67	3	4	6	0.20	0.23	0.25
28	2	3	5	0.41	0.04	0.76	69	3	3	5	0.39	0.48	0.50
30	2	1	1	0.36	0.08	0.83	70	3	4	6	0.33	0.19	0.84
31	2	4		0.12	0.10	0.39	71	3	2		0.33	0.28	0.43
32	2	2	4	0.40	0.13	0.33	72	3	1	2	0.34	0.13	0.72
33	2	1	1	0.46	0.14	0.88	74	3	4	6	0.42	0.29	0.54
35	2	2	4	0.37	0.19	0.78	75	3	4		0.29	0.15	0.53
37	2	2	4	-0.09	0.39	0.11	76	3	4		0.25	0.38	0.46
39	2	3	5	0.38	0.27	0.60	78	3	3		0.51	0.22	0.63
40	2	1	1	0.46	0.25	0.59	79	3	2		0.29	0.28	0.44
42	2	1	2	0.43	0.10	0.88	80	3	4		0.38	0.29	0.40
43	2	2	4	0.37	0.30	0.42	82	3	2	4	0.36	0.22	0.66

**Table 84. Constructed-Response Item Analyses, English Grade 10 Science**

Mean Item-Total Corr.: 0.44 Mean p-Value: 0.41

Item #	Part	Session	CS	SA	Item-Total Corr.	% Score 0	% Score 1	% Score 2	% Score 3	% Score 4	Omit %	p-Value
6		1	4	6	0.49	50.25	35.09	13.57			1.09	0.31
21		1	1	2	0.53	18.35	9.63	30.48	20.69	19.72	1.13	0.53
22		1	1	1	0.46	42.54	24.47	30.46			2.53	0.43
23		1	1	2	0.49	46.65	50.30				3.04	0.50
24		1	1	1	0.47	12.72	15.14	28.06	40.52		3.56	0.64
25		1	1	2	0.41	66.51	30.69				2.80	0.31
26		1	1	1	0.37	46.10	50.40				3.51	0.50
27		1	1	1	0.49	51.15	45.17				3.68	0.45
29		2	3		0.24	36.00	62.47				1.53	0.62
34		2	2		0.26	87.91	8.53	0.13			3.43	0.04
36		2	4	6	0.56	18.79	34.71	43.48			3.02	0.61
38		2	1		0.44	58.11	38.62				3.26	0.39
41		2	3	5	0.43	67.83	24.90	1.03			6.24	0.13
44		2	1	1	0.53	38.75	18.27	40.41			2.57	0.50
50		2	2		0.47	66.92	15.03	14.76			3.29	0.22
53		2	3	5	0.37	75.19	15.82	2.85			6.14	0.11
61		3	4	6	0.52	51.83	33.72	10.12			4.33	0.27
65		3	1	2	0.55	9.63	18.31	69.81			2.25	0.79
68		3	2		0.57	41.24	36.18	20.56			2.01	0.39
73		3	4		0.45	51.25	45.63				3.12	0.46
77		3	1	2	0.33	23.51	35.59	39.14			1.75	0.57
81		3	1	2	0.24	78.13	19.41				2.46	0.19
83		3	1	2	0.50	42.92	54.58				2.50	0.55

**Table 85. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 3 Reading**

Item	a	b	c	Fit-Z
2	0.72167	-1.0475	0.0827	15.51
3	0.36822	-1.9891	0.2000	8.29
4	0.74664	-1.3839	0.0600	12.50
5	0.71460	-1.8761	0.2000	47.19
7	0.93788	0.2471	0.2017	9.23
8	0.83057	0.7584	0.1916	21.80
9	1.05345	0.1161	0.2773	13.17
11	1.41997	-0.3167	0.2774	10.02
12	0.93499	-0.3265	0.2520	6.05
13	0.83078	-1.0900	0.0935	15.18
15	0.65843	0.2069	0.1750	17.99
16	0.83580	-1.2321	0.0439	18.93
17	0.96030	0.1441	0.2605	8.84
18	0.89785	-0.8689	0.1383	5.01
19	1.12331	-0.0620	0.2437	19.40
20	1.12197	-0.4559	0.2808	3.74
21	1.10042	-1.3322	0.2421	8.92
22	1.22531	0.4161	0.2252	23.19
23	1.34366	-0.6969	0.2304	11.53
24	0.90807	-1.1991	0.1815	10.90
27	0.44297	0.5924	0.2319	25.05
28	0.62312	-0.3479	0.2044	113.61
29	0.47605	0.0940	0.0792	24.91
30	1.05692	-0.1470	0.2164	22.23
32	1.14187	0.2551	0.4180	27.59
33	1.04138	-0.4872	0.2081	9.80
34	1.08827	-0.4841	0.3749	10.82
36	0.97151	-0.9868	0.2969	14.55
37	1.49099	-0.6607	0.2038	8.39
38	1.12421	-0.9157	0.1978	6.59
39	0.61951	0.9040	0.3715	37.53
40	0.37640	0.5259	0.1571	7.23

**N=49454 M1=79.8056 M2=481.036 Critical Z=131.88**

**Table 86. Item Parameter and Fit Summary, Constructed-Response Items, Grade 3 Reading**

Item	f	g1	g2	g3	g4	Fit-Z
1	0.73194	-0.2302	0.3318	0.8109	.	69.49
6	0.82977	-1.3837	0.0559	.	.	214.68
10	1.27415	-1.2303	2.4087	.	.	144.11
14	1.03428	0.6983	0.0149	.	.	20.52
25	0.72518	-0.2777	-0.1130	1.1499	.	131.05
26	0.58144	1.8927	-1.3734	-0.4781	.	153.21
31	1.06263	0.0759	2.3128	.	.	35.32
35	0.96586	-0.7166	-0.6956	-0.3690	.	17.69

**N=49454 M1=79.8056 M2=481.036 Critical Z=131.88**

**Table 87. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 3 Spanish Reading**

Item	a	b	c	Fit-Z
3	0.93745	1.2845	0.1122	0.46
4	0.34006	-0.7786	0.2000	2.84
5	0.46652	1.8242	0.1691	1.76
6	0.97645	1.6655	0.1508	-0.78
7	0.67079	1.5778	0.1390	-0.65
9	0.69928	0.4300	0.2000	-0.37
10	0.50358	-0.1872	0.2000	2.94
11	0.68534	-0.4401	0.2000	0.21
12	0.53662	0.2077	0.1659	0.37
13	0.91829	1.1092	0.1724	-0.13
14	0.18065	3.9038	0.2000	0.93
15	0.98753	-0.9296	0.2000	-0.94
16	0.89134	-1.3004	0.2000	-0.73
18	0.64552	-0.8697	0.2000	1.11
19	1.00044	-0.8954	0.2000	-1.03
20	0.91870	-0.5557	0.2000	1.11
21	1.54670	-1.9758	0.2000	-0.41
22	0.91119	-0.1558	0.3626	-0.72
23	1.41577	-1.4183	0.2000	-0.52
24	0.68224	-1.4662	0.2000	-0.18
27	0.67958	-1.9677	0.2000	1.36
28	0.85301	-0.8690	0.1528	0.09
29	0.59387	-1.1204	0.2000	1.68
30	1.06614	0.3737	0.2521	0.60
31	1.01174	0.0811	0.2791	1.86
33	0.64071	-0.1927	0.2000	-0.03
34	1.01441	0.9990	0.3235	0.35
35	0.27636	3.5401	0.2294	-0.83
37	1.28936	-0.8824	0.1173	-0.10
38	0.73287	-0.3789	0.2000	-0.77
39	0.89423	-0.1471	0.2177	0.46
40	0.69073	-0.0368	0.1881	-0.03

Pre-Equated N=1349, M1=39.2941, M2=528.4950, Critical Z=3.60

**Table 88. Item Parameter and Fit Summary, Constructed-Response Items, Grade 3 Spanish Reading**

Item	f	g1	g2	g3	g4	Fit-Z
1	0.50984	0.7846	-1.0093	-0.3516		6.00
2	0.75468	0.6805	-0.4074	-1.5945		-0.71
8	0.96815	-0.6878	-0.3734			1.66
17	0.65207	-0.5415	-0.4347	0.1401		0.52
25	1.11052	-1.7454	-0.9812			-0.05
26	0.54739	0.6116	0.0062			3.42
32	0.71939	-0.5830	0.3039	1.8817		1.12
36	1.14170	-1.0634	-0.3895			0.98

Pre-Equated N=1349, M1=39.2941, M2=528.4950, Critical Z=3.60

**Table 89. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 3 Writing**

Item	a	b	c	Fit-Z
2	1.23656	-0.3028	0.3720	15.81
3	0.66093	-1.3443	0.1669	4.87
4	0.72197	-0.3064	0.1883	1.84
5	1.26265	-1.2265	0.2452	6.19
6	1.11822	-1.3685	0.3368	3.58
7	0.73691	-0.6090	0.4439	4.37
8	0.89706	-0.2926	0.4985	20.95
9	0.76768	-1.3452	0.2000	5.34
10	1.22435	-0.2031	0.4992	39.81
11	0.91427	-2.9725	0.2000	7.40
12	0.66508	-3.0978	0.2000	93.92
14	0.65671	-0.1832	0.3889	9.46
15	0.83370	-0.9742	0.3290	7.43
16	0.99125	0.0009	0.1879	14.54
17	0.96233	-0.4090	0.2235	11.59
18	0.83091	-1.2888	0.2000	3.30
19	0.85092	-0.7149	0.3132	2.65
20	1.23746	-1.1400	0.3739	5.13
21	0.98331	-0.5977	0.3654	23.10
22	0.46567	-2.5397	0.2000	21.46
23	1.05366	-0.2230	0.2082	19.77
24	1.07921	-0.3877	0.2764	14.33
25	0.86559	-0.1539	0.2458	10.92
26	0.94068	-1.4717	0.2893	2.71
27	0.81545	-0.1422	0.1734	9.67
28	1.33948	-1.2587	0.3219	6.38
29	0.71372	-3.0625	0.2000	11.75
31	0.89320	-1.9304	0.2000	1.95
32	0.74106	-1.3015	0.2649	2.16
33	1.31386	-0.5985	0.2378	12.62
34	1.10755	-1.4943	0.2548	31.13
35	1.45451	-0.7157	0.2259	28.30
36	0.85116	-0.4116	0.2321	1.89
37	0.77860	-0.2457	0.2475	7.42
38	0.76141	-0.6400	0.1671	1.70

**N=60621 M1=45.623 M2=461.7065 Critical Z=161.66**



**Table 90. Item Parameter and Fit Summary,  
Constructed-Response Items, Grade 3 Writing**

Item	f	g1	g2	g3	g4	Fit-Z
1A	1.03246	-1.4965	.	.	.	17.03
1B	1.38499	-0.5220	.	.	.	5.56
1C	1.28781	-0.5181	.	.	.	15.47
1D	1.12137	-0.7032	.	.	.	11.48
1E	0.60167	-2.3277	.	.	.	48.06
1F	0.97168	0.6531	.	.	.	21.86
13A	1.27391	-5.2007	4.0127	.	.	77.85
13B	1.90485	-5.5630	.	.	.	7.23
13C	1.58820	-1.9810	.	.	.	6.87
13D	1.72191	-3.2881	.	.	.	7.11
30A	1.27599	-4.8063	2.9703	.	.	75.38
30B	1.79518	-4.9818	.	.	.	8.96
30C	1.60511	-1.5358	.	.	.	6.51
30D	1.68597	-2.7196	.	.	.	14.77
39A	1.36527	-5.1837	3.1979	.	.	55.11
39B	2.02876	-6.1187	.	.	.	12.11
39C	1.62954	-1.5282	.	.	.	9.89
39D	1.60319	-2.7032	.	.	.	8.48

**N=60621 M1=45.623 M2=461.7065 Critical Z=161.66**

**Table 91. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 3 Spanish Writing**

<b>Item</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>Fit-Z</b>
001	0.72636	-1.6356	0.2000	-0.42
002	0.69865	-1.6673	0.2000	-0.09
003	0.79960	-1.7859	0.2000	0.18
005	0.56896	-0.1673	0.2000	0.38
006	0.67890	-1.2497	0.2000	5.31
007	0.57375	-0.7923	0.2000	0.07
008	0.69572	0.3141	0.1901	-0.75
009	0.88029	0.3406	0.2014	0.18
010	0.86365	-2.3712	0.2000	1.26
011	0.71952	-1.5266	0.2000	-0.21
012	0.98466	-1.9949	0.2000	0.89
013	0.55883	-1.1144	0.2000	1.64
014	0.70850	-1.0884	0.2000	-0.06
015	0.80286	-0.9017	0.2000	-1.51
017	0.95328	-0.8250	0.2000	0.81
018	1.35829	1.9369	0.1836	0.91
019	0.98987	1.7456	0.1935	0.41
020	0.76280	-0.3028	0.2000	-0.26
021	0.56024	-0.8516	0.2000	-0.21
022	0.91660	0.1488	0.2061	1.56
023	0.72320	-0.7483	0.2000	2.07
024	0.64572	-0.6175	0.2000	1.94
025	0.74924	-1.0085	0.2000	0.38
026	0.77749	1.0288	0.1889	-0.29
028	0.60282	-0.5751	0.1929	0.18
029	1.09060	-1.4228	0.2000	-0.21
030	0.96215	-1.3955	0.2000	-0.72
031	0.91521	-0.7958	0.2000	-0.66
032	0.63928	-0.0727	0.2000	-0.45
033	0.83169	-0.2761	0.1889	-0.32
034	1.15607	-1.7872	0.2000	-0.91
035	1.03792	-1.8187	0.2000	-1.08
036	0.84772	-0.4358	0.2000	2.11
037	0.59765	0.3643	0.2000	-0.60
038	0.56619	-1.0763	0.2000	-0.13

**Pre-equated N=1471, M1=64.1898, M2=501.4712, Critical Z=3.92**

**Table 92. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 3 Spanish Writing**

Item	f	g1	g2	g3	g4	Fit-Z
4A	1.08595	-1.7175				-1.12
4B	1.10075	1.3937				2.66
4C	1.05723	-0.8095				0.68
4D	1.07840	-0.7179				0.51
4E	1.14458	-0.1152				0.73
4F	0.91387	-1.5841				0.33
16A	1.05874	-2.6250	1.2813			-0.51
16B	1.16766	-0.7295				0.23
16C	1.84093	-1.9080				2.70
16D	1.68899	-3.1443				-0.99
27A	1.41742	-1.5381	1.7595			2.24
27B	1.58094	0.1036				0.50
27C	2.23694	-1.1389				-0.68
27D	1.98233	-2.0143				-0.39
39A	1.06278	-1.8229	1.4828			-0.62
39B	1.06040	0.4272				-0.82
39C	1.63350	-0.8728				0.40
39D	1.23269	-2.0762				0.39

**Pre-equated N=1471, M1=64.1898, M2=501.4712, Critical Z=3.92**

**Table 93. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 3 Mathematics**

Item	a	b	c	Fit-Z
1	1.06969	-1.3975	0.0959	6.56
2	0.66595	1.0029	0.0648	4.13
3	0.82829	0.3314	0.2300	2.04
5	0.69862	-2.7805	0.2000	7.15
6	0.78639	-2.0677	0.1384	9.17
7	0.72221	-3.0863	0.2000	15.39
8	0.73278	-0.9638	0.1263	5.76
10	0.72609	-3.3845	0.2000	4.95
11	1.07057	-0.4599	0.0996	8.74
12	0.74917	-1.5870	0.0938	2.57
13	0.64264	-0.3385	0.2622	0.33
14	0.84773	-0.7500	0.3306	1.52
15	0.45840	-1.4409	0.2000	6.96
17	1.20376	0.0968	0.1685	14.84
18	1.03833	-1.8412	0.0971	14.00
19	0.58221	-1.6728	0.1509	3.99
21	1.00108	-0.6244	0.2390	5.63
22	0.38731	-0.7627	0.1578	5.00
23	0.51345	-2.9776	0.2000	10.16
25	0.67599	-1.4755	0.0710	3.67
27	0.86738	-0.2855	0.0736	7.52
28	0.73119	-1.6210	0.1013	1.46
29	1.05794	-0.9171	0.1644	3.19
30	0.93375	-0.6890	0.0509	12.69
31	0.68877	-0.9692	0.0747	2.76
32	1.07871	-0.5666	0.1062	3.85
34	0.61295	-1.1163	0.0636	2.22
35	0.35795	-3.6398	0.2000	1.41
36	0.65205	-0.4606	0.0948	4.78
37	0.66998	-1.2441	0.1068	1.86
38	0.60148	-1.8117	0.2000	2.58
39	0.80130	-1.0253	0.1063	3.49

**N=54608 M1=79.8056 M2=481.036 Critical Z=145.62****Table 94. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 3 Mathematics**

Item	f	g1	g2	g3	g4	Fit-Z
4	0.83079	0.0121	-0.8636	.	.	20.88
9	1.45299	-1.5267	2.3455	.	.	83.93
16	1.02007	0.0886	0.1838	.	.	186.55
20	1.12714	-2.0282	0.4898	0.4508	.	71.32
24	1.80247	-0.5193	1.9343	.	.	63.52
26	1.10950	-2.3123	-0.7773	.	.	38.52
33	0.81129	-2.0258	-0.9907	.	.	20.21
40	0.94497	-3.4827	0.0530	0.0953	.	16.83

**N=54608 M1=79.8056 M2=481.036 Critical Z=145.62**

**Table 95. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 4 Reading**

Item	a	b	c	Fit-Z
4	1.58643	-0.9830	0.3321	1.80
5	1.42017	0.0641	0.2511	11.41
6	0.72053	-1.0496	0.2611	12.79
7	1.25532	-0.8051	0.2847	2.25
8	1.00274	-0.2590	0.2540	21.14
9	0.84549	-1.7849	0.2000	5.85
12	1.11965	0.4322	0.2926	25.03
13	0.75569	-0.5331	0.1716	9.12
14	1.16881	0.4983	0.1781	12.62
16	1.22920	-0.3937	0.1457	7.00
17	1.00913	1.5322	0.3248	8.69
18	0.76770	0.9400	0.1431	4.14
19	1.10610	2.0389	0.1264	12.36
21	1.18625	0.6523	0.1674	13.93
25	0.72239	-1.3955	0.0939	17.97
26	0.35311	-2.1205	0.2000	28.53
27	0.78111	-1.8409	0.0879	11.53
28	0.74171	-1.8390	0.2000	36.01
30	0.59074	-1.0612	0.2000	22.54
31	0.78581	0.5872	0.1947	3.10
33	1.29822	-0.9283	0.1901	10.74
34	1.08533	-0.4182	0.2314	3.68
35	1.08250	-0.4277	0.2024	4.58
36	1.17931	0.5326	0.1461	48.17
37	1.47488	-0.8434	0.2787	6.58
38	1.18745	0.0133	0.1914	10.26
40	0.61426	0.5377	0.1961	5.28
41	0.97397	-1.0660	0.1637	5.96
42	0.77159	0.5289	0.2476	20.39
43	1.07656	-1.4563	0.2380	3.96
45	0.52878	-1.9916	0.2000	69.02
46	1.13247	-0.0009	0.1839	13.99
47	0.82525	-0.8116	0.2963	10.66
48	1.37268	0.1184	0.2236	27.59
49	0.47482	0.2969	0.1141	11.90
50	0.75656	-1.1434	0.1892	4.85
51	0.97925	1.6224	0.2356	4.84
52	0.93552	0.4907	0.1785	9.43
95	1.03127	-0.3340	0.2042	3.14
96	0.76468	-1.0515	0.2664	5.37
97	0.89157	-1.8233	0.2082	83.56
98	1.16554	-0.9319	0.3105	-0.29
99	0.97110	0.3083	0.1893	13.77
100	1.15709	-1.4518	0.3306	3.55
101	0.92118	-0.8713	0.1334	0.72
104	0.97359	-1.4566	0.3408	14.61
105	1.17904	-1.4061	0.2173	1.75
106	1.06998	-1.2043	0.2550	8.18
107	0.93268	0.5835	0.3884	13.69
108	0.35922	-0.3552	0.1097	15.15

Continued

**Table 95. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 4 Reading  
(Concluded)**

Item	a	b	c	Fit-Z
109	0.44033	-1.4505	0.2000	121.51
110	0.83553	-0.8067	0.1448	1.71
111	1.00616	-0.5430	0.1556	7.79
112	1.34056	-0.6515	0.2275	4.51
113	1.59332	-1.1114	0.2377	5.21
114	1.13656	0.9132	0.2474	14.57
<b>N=61325 M1=49.3747 M2=588.8542 Critical Z=163.53</b>				

**Table 96. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 4 Reading**

Item	f	g1	g2	g3	g4	Fit-Z
10	0.76862	-1.0332	0.1099	.	.	62.94
11	0.85156	-1.4115	0.7081	2.2470	.	25.84
15	0.79383	-0.7868	1.6291	.	.	46.04
20	0.69967	0.2130	-0.2653	0.3230	.	25.82
22	0.93709	-0.8061	0.4152	2.6424	.	68.08
24	0.68174	-0.6068	-0.3603	0.8351	.	65.91
29	0.69261	-1.7585	-0.3126	.	.	273.93
32	0.81601	-0.7718	2.1520	.	.	13.25
39	0.54496	-1.2956	0.9195	1.1977	.	100.20
44	0.73059	-0.2554	-0.8524	.	.	41.75
102	0.71832	-1.0250	-1.6608	.	.	66.56
103	0.74455	-1.1806	-1.2459	-1.1879	.	31.56
115	0.93272	-0.3140	-0.8079	.	.	235.33
116	1.00820	-1.1883	0.7441	3.0688	.	346.19
<b>N=61325 M1=49.3747 M2=588.8542 Critical Z=163.53</b>						

**Table 97. Item Parameter and Fit Summary,  
Multiple-Choice Items, Grade 4 Spanish Reading**

Item	Source Year	a	b	c	Fit-Z
4	2004	0.83	0.55	0.18	-0.1
5	2005	1.08	0.40	0.26	-0.4
6	2005	0.37	-0.98	0.20	1.1
7	2004	1.64	1.44	0.27	-0.2
8	2004	0.50	2.47	0.22	0.0
9	2004	0.86	-0.09	0.31	-0.2
10	2004	0.67	0.02	0.30	0.0
11	2004	0.17	-1.09	0.20	-0.6
12	2004	0.24	3.74	0.20	0.9
15	2004	0.26	-1.31	0.20	-1.1
16	2004	0.61	-0.87	0.20	-0.1
17	2004	0.33	-2.10	0.20	-0.2
18	2004	0.65	-0.91	0.20	0.4
19	2004	0.87	-2.42	0.20	-0.1
20	2004	0.14	0.37	0.20	1.3
21	2004	0.91	-0.01	0.18	-0.3
22	2004	0.92	0.25	0.16	-0.1
23	2004	0.57	0.30	0.20	2.9
24	2007	0.58	-0.48	0.20	-0.5
26	2004	0.36	0.36	0.20	0.0
27	2005	1.29	-0.76	0.40	0.2
28	2004	0.46	-0.70	0.20	-1.2
30	2004	0.46	1.17	0.20	-1.4
32	2007	0.74	0.91	0.20	-0.4
35	2004	0.94	-0.95	0.20	-1.5
36	2004	1.19	0.02	0.18	0.6
37	2004	0.87	-1.01	0.20	-0.3
38	2004	0.77	0.92	0.20	0.1
39	2004	0.47	-0.26	0.20	-0.6
40	2004	0.85	-1.09	0.20	-0.4
41	2004	0.75	0.07	0.20	0.1
43	2004	0.79	1.02	0.17	-0.5
46	2004	0.86	-1.13	0.20	-0.5
47	2004	1.39	2.34	0.34	-0.9
48	2004	0.99	1.82	0.27	2.4
91	2004	0.88	-1.58	0.20	-0.7
92	2004	0.58	-0.77	0.20	2.7
93	2005	0.94	-0.07	0.20	0.5
94	2004	0.55	-1.11	0.20	0.5
95	2004	0.80	-1.43	0.20	0.6
96	2005	0.98	-0.24	0.24	0.3
99	2004	0.50	0.62	0.20	0.8
101	2004	0.67	0.49	0.18	-1.1
102	2004	0.95	0.76	0.18	0.3
103	2004	0.81	-1.02	0.20	0.3
104	2004	0.87	-0.03	0.35	0.7
105	2007	0.56	0.06	0.20	-0.3

continued

**Table 97. Item Parameter and Fit Summary,  
Multiple-Choice Items, Grade 4 Spanish Reading (Concluded)**

Item	Source Year	a	b	c	Fit-Z
106	2004	1.09	1.37	0.18	-0.2
107	2004	1.08	0.59	0.24	-0.2
109	2004	0.50	-0.55	0.20	0.1
110	2004	0.51	0.50	0.20	-0.3
111	2004	0.96	-0.50	0.21	1.3
112	2004	0.48	0.09	0.20	1.1
113	2004	0.32	-1.53	0.20	1.7
114	2004	0.70	-0.31	0.21	-1.1
115	2004	0.82	0.19	0.24	-0.3

2004 pre-equated M1= 33.6050, M2= 534.8632, N=523, Critical Z=1.39

2005 pre-equated M1= 39.5116, M2= 550.2315, N=489, Critical Z=1.30

2007 pre-equated M1= 36.1958; M2= 514.4683, N=264, Critical Z=0.70

**Table 98. Item Parameter and Fit Summary,  
Constructed-Response Items, Grade 4 Spanish Reading**

Item	Source Year	f	g1	g2	g3	g4	Fit-Z
13	2004	0.57	-0.60	-0.85	0.97		0.1
14	2004	0.44	0.17	2.84			0.7
29	2004	0.92	-1.39	-0.76	-1.82		-2.0
31	2007	1.13	1.92	1.17			-1.1
33	2004	0.51	-0.10	0.50	0.59		1.2
34	2004	0.82	-0.60	-0.16	-0.21		1.3
42	2004	0.71	0.29	0.84			-0.3
44	2004	0.53	-0.16	-0.41			1.7
45	2007	0.68	0.24	0.39	1.66		-0.7
97	2004	0.51	-0.50	0.36			-0.7
98	2004	0.59	-0.40	0.16	0.37		-1.1
100	2004	0.74	-0.30	0.90			-1.7
108	2004	0.74	-0.47	-1.38			0.5
116	2004	0.45	0.79	-1.94	1.37		1.4

2004 pre-equated M1= 33.6050, M2= 534.8632, N=523, Critical Z=1.39

2007 pre-equated M1= 36.1958; M2= 514.4683, N=264, Critical Z=0.70



**Table 99. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 4 Writing**

<b>Item</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>Fit-Z</b>
53	0.59010	-2.1613	0.2000	9.15
54	0.81168	-1.7969	0.2000	2.57
55	0.69041	0.0282	0.2477	5.29
56	0.46679	-1.9994	0.2000	34.85
57	0.77633	-0.2517	0.2554	2.93
58	0.79706	-1.8216	0.2000	2.98
59	0.63016	-2.8244	0.2000	7.37
60	0.57901	-2.1566	0.2000	17.52
61	0.71342	0.9107	0.1878	8.42
62	0.81375	-1.8542	0.1089	10.96
63	0.77685	-2.0238	0.2000	0.92
64	0.75168	-2.1943	0.2000	4.19
65	0.55669	-1.5609	0.1510	1.15
66	0.91648	0.0119	0.2435	8.81
67	1.12398	-0.8990	0.3073	8.78
68	0.61731	-1.8184	0.2000	2.66
69	0.63011	0.2391	0.2161	0.99
70	0.69887	-0.1021	0.1364	1.06
71	1.18197	-0.6712	0.1687	11.50
72	0.60641	-2.3803	0.0000	23.99
74	0.58180	0.8882	0.2440	5.18
75	1.07031	-0.0084	0.2175	9.51
76	0.87572	-0.0514	0.1757	6.23
77	0.70817	0.5704	0.1780	5.56
78	0.64133	-1.7950	0.2025	57.58
79	0.88041	-0.3154	0.2711	2.28
80	1.17254	-0.8130	0.2865	12.47
81	1.00261	-1.9098	0.1470	22.02
82	1.17520	-0.2420	0.1612	12.50
83	0.73974	-1.6456	0.2000	6.59
84	0.84879	-0.5867	0.1048	4.85
85	0.45068	1.5103	0.1980	28.69
86	0.96708	-1.2546	0.1233	9.06
87	1.29940	-0.9685	0.1470	7.90
88	1.23075	-0.4557	0.4624	6.67
89	1.28366	-0.6904	0.2788	11.33
90	0.47381	2.0076	0.2000	64.10
91	0.87111	-0.7688	0.1840	5.74
92	0.86264	0.7195	0.3877	6.25
93	0.91362	-0.7034	0.2213	0.53
<b>N=61008 M1=46.0005 M2=487.0355 Critical Z=162.69</b>				

**Table 100. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 4 Writing**

Item	f	g1	g2	g3	g4	Fit-Z
1	0.80443	-4.6327	.	.	.	2.91
2A	1.05872	-0.5726	.	.	.	6.46
2B	0.73795	-0.5507	.	.	.	5.71
2C	1.08723	-1.5341	.	.	.	4.97
2D	1.11130	-1.2611	.	.	.	7.41
2E	1.54405	-3.8393	.	.	.	4.52
2F	1.49701	-3.0439	.	.	.	26.33
3A	1.00501	-2.6462	-1.7096	-0.0656	1.5596	200.12
3B	1.29329	-5.6751	-2.7433	-0.1540	1.9077	64.39
3C	1.53807	-6.2842	-2.7510	.	.	27.72
23	0.63659	-0.9811	-2.0365	0.1890	1.9081	201.74
73	0.74639	-2.3323	-2.9398	-0.0339	1.9886	100.38
94	0.80116	-1.9697	-2.2710	0.3245	2.2210	123.37
<b>N=61008 M1=46.0005 M2=487.0355 Critical Z=162.69</b>						

**Table 101. Item Parameter and Fit Summary,  
Multiple-Choice Items, Grade 4 Spanish Writing**

Item	Source Year	a	b	c	Fit-Z
49	2004	0.63	-1.77	0.20	0.0
50	2004	0.77	-1.13	0.20	-0.4
51	2004	0.61	-1.44	0.20	0.5
52	2004	0.41	1.19	0.20	-0.1
53	2004	0.73	-2.73	0.20	-1.3
54	2004	0.55	-0.15	0.20	0.9
55	2005	0.56	-1.26	0.20	1.4
56	2004	0.56	-1.38	0.20	1.0
57	2004	0.67	0.91	0.19	-0.7
58	2004	1.01	0.64	0.31	0.9
59	2004	0.65	0.81	0.20	-0.5
60	2004	0.49	0.23	0.20	-0.7
61	2004	1.10	0.64	0.30	-0.2
62	2004	0.59	2.15	0.19	-0.8
64	2004	0.87	0.97	0.24	-0.2
65	2004	1.09	-0.58	0.23	-1.5
66	2004	1.12	0.33	0.35	0.5
67	2004	1.21	0.10	0.26	-0.7
68	2004	1.28	-0.24	0.20	-0.3
69	2004	1.01	0.07	0.19	0.4
70	2004	0.91	0.74	0.20	-0.5
71	2004	0.56	0.45	0.20	2.2
72	2004	0.64	0.31	0.20	-0.1
73	2004	0.63	1.09	0.22	-1.1
74	2004	0.96	-0.16	0.30	3.7
75	2004	0.37	1.69	0.21	-0.5
76	2004	0.63	0.98	0.20	-0.3
77	2004	0.66	1.31	0.23	-1.1
78	2004	1.22	1.17	0.22	-0.8
79	2004	0.23	-0.69	0.20	1.8
80	2004	1.64	1.21	0.26	-1.0
81	2005	0.92	0.48	0.30	-0.9
82	2004	1.27	0.63	0.18	0.3
83	2005	0.52	0.21	0.19	0.8
84	2005	1.02	0.50	0.20	-0.6
85	2004	1.10	0.81	0.19	1.5
86	2004	0.32	2.81	0.20	-0.8
87	2004	0.95	1.37	0.19	-0.1
88	2004	0.77	-0.23	0.20	-0.6
89	2004	0.72	0.65	0.19	-0.5

2004 pre-equated M1= 38.1156, M2= 519.2253, N=526, Critical Z=1.40

2005 pre-equated M1= 36.9687, M2= 524.4168, N=490, Critical Z=1.31

**Table 102. Item Parameter and Fit Summary, Constructed-Response Items, Grade 4 Spanish Writing**

Item	Source Year	Part	f	g1	g2	g3	g4	Fit-Z
1	2005		0.44	-3.42				-1.7
2	2002	A	1.40	-2.79				-0.9
2	2002	B	1.11	-0.58				-0.2
2	2002	C	0.85	-1.11				-0.1
2	2002	D	0.54	-0.75				-0.1
2	2002	E	1.21	-0.81				0.2
2	2002	F	1.25	0.74				-0.5
3	2005	A	0.66	-0.06	-1.80	-0.33	2.52	1.6
3	2005	B	1.09	-3.73	-2.60	-0.00	3.15	-1.2
3	2005	C	1.14	-4.33	1.14			1.0
25	2005		0.57	0.21	-1.43	0.08	1.90	1.2
63	2007		0.72	-1.65	-1.25	0.99	2.18	-2.6
90	2005		0.46	0.35	-2.18	-0.20	1.00	-1.1

2002 pre-equated M1= 39.9142, M2= 522.7280, N=1,001, Critical Z=2.67

2005 pre-equated M1= 36.9687, M2= 524.4168, N=490, Critical Z=1.31

2007 pre-equated M1= 33.0014; M2= 508.4550, N=264, Critical Z=0.70

**Table 103. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 4 Mathematics**

Item	a	b	c	Fit-Z
1	0.82743	-0.4720	0.0828	13.50
2	0.97215	-1.3100	0.1213	-0.33
3	0.81442	0.4809	0.2887	7.88
4	0.94636	-0.6373	0.3951	9.54
6	1.01443	-2.0308	0.1787	2.74
7	0.69774	-2.8036	0.2000	9.24
8	0.88743	-1.1230	0.3161	4.69
9	0.70509	-2.3557	0.2000	9.39
10	0.91280	-0.4554	0.1563	0.48
12	0.70016	-3.3588	0.2000	9.56
13	0.40991	-2.1363	0.1650	4.56
14	0.84449	0.2714	0.2326	1.60
16	0.82964	-1.0246	0.1925	3.01
17	0.71801	-0.4687	0.1747	88.57
19	0.49095	-3.0211	0.2000	7.48
20	0.90980	-0.0502	0.1925	1.95
21	1.00640	0.0488	0.1322	8.17
22	0.89311	1.1409	0.0750	9.47
24	0.71081	-0.8240	0.0414	3.45
25	0.91070	-0.8262	0.1624	4.54
26	0.64546	-4.1089	0.2000	3.12
27	0.89821	-0.8739	0.2164	15.42
29	0.57336	-2.4559	0.2000	0.70
31	0.52403	-2.0162	0.2000	0.02
32	0.76732	-1.5775	0.1747	34.49
34	0.68641	0.1146	0.1051	1.91
35	0.70058	-1.2679	0.0562	12.97
36	0.68398	-2.7400	0.2000	11.84
37	1.12238	-0.6738	0.1697	17.04
38	0.57829	-0.3920	0.2406	5.05
39	1.27173	0.8909	0.2008	59.81
41	0.43647	-1.6088	0.2000	11.61
42	0.96133	-1.5933	0.1273	2.60
43	0.41434	-3.4075	0.2000	11.06
44	0.64955	-2.5076	0.2000	10.00
45	0.65865	-2.6898	0.2000	13.04
47	0.79133	-2.9279	0.2000	1.16
48	0.53368	-2.5136	0.2000	10.04
50	0.64258	-3.6971	0.2000	6.82
51	0.68888	-1.0115	0.2590	6.23
52	0.81728	-1.3172	0.2159	2.42
53	0.82877	-2.2855	0.2000	9.00
54	0.56589	-2.4764	0.2000	2.29
56	1.05575	-1.4318	0.2445	4.62
57	0.65247	-0.8155	0.2362	4.24
58	0.90093	-1.0002	0.0946	-0.77
59	0.94476	-2.3892	0.2000	2.25

continued

**Table 103. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 4 Mathematics (Concluded)**

Item	a	b	c	Fit-Z
61	0.89138	-0.6198	0.1471	-0.48
62	0.45773	-4.1765	0.2000	9.47
63	1.19849	-0.6879	0.1098	4.72
64	0.71231	-0.6825	0.1457	1.53
66	0.57110	-0.4942	0.1161	4.41
67	0.44569	-2.8247	0.2000	39.36
68	1.04834	-0.0401	0.2227	2.45

**N=55169 M1=65.8876 M2=509.9313 Critical Z=147.12**

**Table 104. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 4 Mathematics**

Item	f	g1	g2	g3	g4	Fit-Z
5	0.90989	-1.2611	-1.2352	.	.	56.19
11	1.00253	-0.8197	0.6410	.	.	13.20
15	0.52737	-2.3700	-1.5859	-0.3179	.	14.33
18	0.81892	-2.5911	-0.4240	0.0424	.	59.58
23	1.00814	-2.8518	-0.0897	0.2837	1.0612	31.87
28	0.93613	0.9300	-0.5438	1.9882	.	103.38
30	1.15010	-1.6741	-1.4724	.	.	27.57
33	1.56859	-0.9487	1.0960	.	.	41.00
40	0.95384	0.2872	0.4654	0.5474	.	22.46
46	0.78423	-1.4808	-1.1552	-0.6650	-0.1094	96.41
49	0.75515	-2.6303	-0.5845	.	.	31.89
55	0.83122	-4.0220	-0.5382	-0.7019	.	37.47
60	0.67076	-2.4174	-1.6178	.	.	12.57
65	0.79240	-0.6621	-0.1568	-0.5030	.	100.67
69	0.75715	-1.3790	-1.1255	-0.4488	0.1678	31.07

**N=55169 M1=65.8876 M2=509.9313 Critical Z=147.12**

**Table 105. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 5 Reading**

Item	a	b	c	Fit-Z
5	0.67439	-1.7212	0.2000	11.28
7	1.35095	-0.0569	0.2859	12.70
8	1.20335	1.4915	0.2025	26.66
9	0.54286	0.2844	0.1510	31.94
13	1.21173	0.2148	0.2157	21.88
14	0.98598	-1.9396	0.2000	22.42
15	0.89068	-0.2048	0.2109	15.77
16	1.10264	-0.7661	0.4532	11.98
17	0.79360	-0.5103	0.1870	1.19
18	0.29604	0.3748	0.2000	143.07
19	0.61558	0.4371	0.1945	6.09
20	1.23037	0.1155	0.2718	16.81
21	0.86307	-0.7866	0.1616	2.98
22	1.06715	0.1902	0.1667	10.45
24	1.22866	-0.4976	0.1453	5.26
25	0.98858	1.2089	0.3278	8.37
26	0.39084	-0.6420	0.2000	72.45
27	0.40072	0.3141	0.2000	11.91
29	0.53875	-1.1298	0.1933	31.35
30	0.97484	-1.4078	0.1785	16.62
31	0.73302	-1.2029	0.0639	45.95
32	0.65403	0.1939	0.2847	3.58
33	0.73752	-1.1671	0.1276	4.71
34	0.82326	-1.3213	0.1575	5.89
36	0.31689	1.0643	0.0764	3.70
37	0.59441	-1.2036	0.0857	23.27
38	0.75207	-0.9117	0.2000	-0.39
39	1.12450	-1.3352	0.1904	1.13
40	0.52203	0.2111	0.1857	8.72
41	0.78404	0.1906	0.2209	4.46
42	0.98425	0.5005	0.3990	6.27
44	0.55785	0.0779	0.2010	1.08
45	0.89081	-1.5799	0.0803	4.02
46	0.81880	0.0282	0.2484	23.20
47	1.07619	-1.9073	0.2000	10.53
49	0.83020	1.8860	0.1927	5.96
50	0.87129	2.0815	0.3096	12.81
51	0.60501	0.1561	0.2400	2.80
52	0.25482	0.6672	0.2000	7.62
97	1.06995	-1.9401	0.1023	14.02
98	0.22822	1.6228	0.2000	13.46
99	0.50809	-1.1852	0.1933	14.38
100	0.60545	-0.8137	0.2000	21.40
101	0.88428	-0.4493	0.2855	7.50
102	0.66868	-1.7785	0.0876	18.24
103	1.29134	-0.5809	0.2888	6.43
104	1.39862	-1.1034	0.1956	4.52

continued

**Table 105. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 5 Reading (Concluded)**

Item	a	b	c	Fit-Z
107	1.06033	-1.1379	0.2622	13.93
108	1.22983	-0.3620	0.2893	9.95
109	0.86017	-0.1200	0.1272	6.14
110	1.09961	-1.1105	0.2553	2.19
111	0.92977	-1.1026	0.1263	2.80
112	1.11238	-0.9162	0.1993	27.12
113	0.74700	0.4584	0.2545	4.06
114	0.78177	0.2286	0.1176	27.41
115	1.20410	-0.7889	0.1414	13.25

**N=60009 M1=56.933 M2=618.6416 Critical Z=160.02****Table 106. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 5 Reading**

Item	f	g1	g2	g3	g4	Fit-Z
4	0.73254	0.4984	0.5312	.	.	30.85
6	0.65701	-1.4668	1.3926	1.2971	.	51.83
10	0.41296	-0.0774	0.4522	0.2150	.	33.96
11	0.89656	-0.1181	-1.2022	0.6026	.	60.50
12	0.83060	-1.2859	0.5529	1.5591	.	209.32
23	0.70740	-0.6276	1.9064	.	.	21.43
28	0.93470	-0.3412	2.1897	.	.	11.65
35	0.36620	-0.5081	2.3397	-0.1314	.	41.74
43	0.54779	-1.4386	0.6259	0.9501	.	50.32
48	0.66029	-0.8303	-1.1253	.	.	32.82
95	1.09079	0.5549	-2.0719	.	.	38.81
96	0.90826	-1.2358	-0.4741	.	.	52.90
105	1.18649	-1.0627	-1.1459	.	.	6.71
106	1.16784	-0.5504	-0.1345	2.8503	.	99.24

**N=60009 M1=56.933 M2=618.6416 Critical Z=160.02**



**Table 107. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 5 Writing**

<b>Item</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>Fit-Z</b>
53	0.62259	0.4592	0.1574	1.97
54	0.65486	0.2154	0.2143	4.54
55	0.62487	-2.4576	0.2000	0.78
56	0.85998	-1.9846	0.2000	3.69
57	1.02209	-1.0636	0.2235	13.58
58	0.93047	-1.4229	0.3731	17.30
59	0.40258	-2.2660	0.2000	13.52
60	1.03118	-1.4516	0.3134	12.75
61	0.63468	-0.6991	0.0993	0.80
62	0.66196	0.3984	0.1539	3.78
63	1.16954	-0.9660	0.2329	4.19
65	0.69593	-0.4882	0.2466	0.56
66	0.99525	-1.4497	0.1317	10.72
67	1.06897	-1.5116	0.2283	11.70
68	0.88462	0.3453	0.1989	8.56
69	0.72984	-1.5996	0.2000	3.60
70	0.87419	-0.9381	0.2523	0.89
71	0.73954	-2.1239	0.2000	15.32
72	0.76834	-1.0171	0.1048	7.34
73	0.96915	-0.2275	0.2054	7.94
74	0.72525	-1.6608	0.1059	5.27
75	0.34058	-0.2350	0.1621	3.77
76	1.31452	-1.0488	0.1965	21.97
77	1.22934	-0.6337	0.1605	31.23
78	1.02962	-0.6762	0.1496	29.67
79	1.03373	-1.0156	0.1483	26.43
80	0.56308	2.1461	0.1016	12.77
81	1.01155	-1.4834	0.1829	2.53
82	1.06004	-0.5543	0.2119	7.12
83	0.60811	0.8570	0.1584	4.79
84	1.36114	-0.6736	0.2885	9.95
85	0.69908	-0.0816	0.2144	1.95
86	0.48384	-0.6798	0.1069	38.52
87	0.76005	0.7453	0.3030	7.05
88	0.65314	-0.8645	0.0524	54.67
89	0.67103	0.0622	0.2439	17.01
90	0.43175	0.9372	0.1410	3.19
91	0.80559	-1.2578	0.2000	40.72
92	1.22709	-0.9982	0.2473	10.57
93	1.27949	-0.4443	0.2372	18.02
<b>N=59681 M1=50.1621 M2=507.7983 Critical Z=159.15</b>				

**Table 108. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 5 Writing**

Item	f	g1	g2	g3	g4	Fit-Z
1	1.01211	-5.0330	.	.	.	5.08
2A	0.98865	-1.5155	.	.	.	2.05
2B	1.09557	-2.6079	.	.	.	1.67
2C	1.44211	-3.6472	.	.	.	9.58
2D	0.65140	-2.1810	.	.	.	148.58
2E	1.26472	0.2782	.	.	.	3.05
2F	1.30855	-1.1036	.	.	.	4.39
3A	1.09011	-2.4477	-2.7762	-0.0560	2.1310	189.98
3B	1.28355	-5.5421	-3.0267	0.0184	2.2741	63.24
3C	1.63848	-6.3450	-3.0062	.	.	8.42
116	0.92979	-2.8192	-2.9729	-0.3472	1.9193	66.20
64	0.82104	-2.6625	-3.1262	-0.9452	1.8015	63.35
94	0.84386	-1.8812	-2.7263	0.0306	2.2899	237.07
<b>M1=50.1621 M2=507.7983 N=59681 Critical Z=159.15</b>						

**Table 109. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 5 Mathematics**

Item	a	b	c	Fit-Z
1	0.71907	-0.5814	0.3579	9.36
2	1.02963	0.1495	0.1358	5.09
3	0.43545	-1.4898	0.2000	11.53
4	0.73196	-0.6540	0.1391	4.88
6	0.95552	-0.1271	0.1888	0.61
7	0.69070	-0.7881	0.2000	7.21
8	0.88491	-0.6552	0.1868	2.56
9	0.55944	-2.6222	0.2000	39.25
11	0.84084	-0.7460	0.2141	5.32
12	0.61696	-2.4222	0.2000	2.64
13	1.09818	-0.0955	0.1095	7.62
14	1.13672	0.4503	0.1757	13.30
15	1.03874	-0.2950	0.2362	3.43
16	0.69728	-1.9197	0.0950	1.38
18	0.78807	-1.0884	0.0631	1.67
19	0.89752	1.8729	0.3609	10.31
21	0.89878	0.1137	0.3136	1.23
22	0.34822	-0.4616	0.2000	20.39
24	1.17171	-0.1428	0.1938	2.65
25	0.65033	-1.6213	0.1782	37.82
26	0.56842	-0.2480	0.1734	0.89
28	1.03734	-1.1747	0.2444	3.84
29	0.40834	1.0413	0.0510	5.24
30	0.76710	-0.5187	0.1505	53.58
31	1.30980	0.7213	0.1490	7.74
32	0.61954	-1.8951	0.2000	7.34
34	0.48037	-1.4567	0.1189	3.12
36	0.74948	-0.1684	0.2414	15.77
37	1.13279	0.0348	0.0428	5.46
38	0.64779	0.1002	0.1726	0.08
40	0.91382	-2.1463	0.2000	3.20
41	0.48330	-0.7042	0.2000	7.46
42	0.57950	-2.7803	0.2000	6.00
43	0.67534	-0.7587	0.0859	1.89
44	0.49984	-1.4059	0.2000	2.47
45	0.48832	-2.4869	0.2000	4.50
47	0.63288	-2.0787	0.2000	0.05
48	0.51677	-1.4864	0.2010	2.23
50	0.59930	-2.5214	0.2000	2.67
51	0.79314	-1.9740	0.2000	5.04
52	1.02336	-0.2286	0.2417	11.43
53	0.50435	-3.2406	0.2000	3.52
55	0.88096	0.1812	0.3047	2.34
56	0.84118	-1.2172	0.0921	0.25
57	1.06273	-0.3334	0.2410	0.96
58	1.42697	0.6662	0.3235	15.91
59	0.64767	-1.5681	0.1782	4.54

continued

**Table 109. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 5 Mathematics (Concluded)**

Item	a	b	c	Fit-Z
61	1.04827	0.5217	0.2010	9.76
62	0.63183	-0.8537	0.2000	2.61
63	0.53988	-1.3978	0.0914	1.32
64	1.11612	-1.5640	0.3814	1.27
65	0.54661	-2.8921	0.2000	14.48
67	0.71227	-1.3172	0.0804	2.12
68	1.41571	0.8642	0.0908	25.62
<b>N=54499 M1=60.3803 M2=533.9045 Critical Z=145.33</b>				

**Table 110. Item Parameter and Fit Summary, Constructed-Response Items, Grade 5 Mathematics**

Item	f	g1	g2	g3	g4	Fit-Z
5	1.11042	-2.4706	-0.1247	.	.	39.25
10	0.70042	-3.2450	-0.4280	-0.3003	.	17.52
17	0.95395	-1.4529	-1.3243	.	.	37.13
20	1.17604	-0.1993	0.4864	1.0018	.	21.45
23	0.79374	-2.0392	-1.5819	-1.2444	-0.5638	86.37
27	0.91863	0.1267	-0.4682	.	.	166.63
33	0.72486	-0.5453	0.9867	0.4876	.	168.61
35	0.98135	-1.0863	-2.4824	.	.	168.83
39	0.58044	-0.4019	0.3161	0.8343	.	189.74
46	1.10941	-3.1832	-1.3140	0.4351	0.3895	11.81
49	1.10526	0.0481	-0.9384	.	.	13.60
54	0.76075	-1.7471	-0.2079	-0.9785	.	25.36
60	0.77696	-1.3458	-0.6076	.	.	154.74
66	0.68823	-0.9244	-0.4202	-0.9756	.	164.12
69	0.75894	-2.8506	-0.8809	-0.3084	-0.4569	25.01
<b>N=54499 M1=60.3803 M2=533.9045 Critical Z=145.33</b>						

**Table 111. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 5 Science**

Item	a	b	c	Fit-Z
1	0.46074	-2.0794	0.2000	3.01
2	0.49863	1.3460	0.0390	8.47
3	0.82972	0.5732	0.2133	5.92
4	0.79766	0.2743	0.3471	3.27
5	0.64580	0.3441	0.2796	4.09
6	0.44922	-1.5378	0.2000	17.93
7	0.85351	-2.1503	0.2000	9.27
9	0.61043	1.6809	0.2666	1.20
10	1.00508	-1.3257	0.0928	3.42
11	0.49111	-1.0943	0.3479	9.66
12	1.07431	-2.4740	0.2000	6.63
13	1.01123	1.2323	0.1042	104.43
14	0.22264	-0.2950	0.2000	2.13
15	1.01230	-0.8664	0.1774	4.33
16	0.84912	1.9550	0.0954	31.34
17	0.81805	1.9507	0.1577	7.39
18	0.54860	-0.7409	0.2000	5.79
19	1.03297	-0.4610	0.1883	2.67
20	0.79311	0.6689	0.3071	5.83
26	0.59004	-2.3116	0.2000	4.33
27	0.85277	-0.9919	0.3617	4.94
28	0.52392	0.0320	0.2000	2.60
30	0.50014	-0.7645	0.2000	5.59
31	0.96251	-0.3624	0.1253	23.52
32	0.44615	-0.6675	0.2000	14.60
33	0.58657	-1.4524	0.2000	10.90
35	0.32710	-3.4292	0.2000	16.30
36	0.64064	0.9543	0.1464	2.82
38	0.28663	-5.4923	0.2000	20.18
39	0.28571	1.0429	0.2000	8.25
40	0.92543	-3.0537	0.2000	7.53
41	0.85172	-1.5149	0.2673	1.96
43	0.70461	-1.2430	0.0771	1.09
44	0.60575	-1.0746	0.1678	0.36
45	0.68794	-0.8732	0.1547	0.61
47	0.88157	0.4634	0.2835	5.65
48	1.04567	0.0365	0.2736	6.87
50	1.33468	-0.9546	0.2169	7.01
51	0.58095	-1.8152	0.2000	13.40
52	0.96482	-1.6202	0.2000	2.49
53	0.74483	-0.1680	0.4981	15.03
54	0.60998	-1.1647	0.1102	3.47
56	0.55040	-0.0518	0.2360	29.86
57	0.81258	-0.0257	0.1658	5.70
59	0.32260	-4.3004	0.2000	32.09
60	1.05251	0.9175	0.2861	8.70
61	0.42809	-0.4777	0.0963	1.39
63	0.61365	-0.7553	0.0549	8.54

continued

**Table 111. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 5 Science (Concluded)**

Item	a	b	c	Fit-Z
64	1.13682	0.7107	0.2642	18.31
65	0.68859	-2.6312	0.2000	5.97
67	0.95673	-1.0867	0.2434	0.45
68	0.54001	0.0102	0.2993	5.65
69	0.89620	-1.1729	0.2945	2.58
70	0.51156	-0.4319	0.2001	42.90
72	0.98578	-1.9089	0.2000	8.13
73	0.60754	-0.2824	0.0852	1.24
74	0.70308	-0.4886	0.2035	24.38
<b>N=54482 M1=54.7387 M2=508.2763 Critical Z=145.29</b>				

**Table 112. Item Parameter and Fit Summary, Constructed-Response Items, Grade 5 Science**

Item	f	g1	g2	g3	g4	Fit-Z
8	0.60932	2.6196	-0.3230	.	.	12.11
21	0.29590	-1.0676	.	.	.	32.22
22	0.84085	0.2887	.	.	.	6.31
23	0.89128	-1.2448	0.3946	.	.	23.90
24	1.06203	-1.5925	0.0744	.	.	69.03
25	0.97569	-0.9538	.	.	.	10.20
29	0.54483	0.5693	0.2366	.	.	27.89
34	0.69322	-0.0179	0.5589	.	.	8.97
37	0.84863	0.4705	0.7673	.	.	66.23
42	1.21149	-0.1737	.	.	.	15.29
46	1.07422	-1.4461	0.0494	.	.	31.58
49	1.08761	-1.1272	2.6881	.	.	44.76
55	0.79440	-2.3029	-0.8083	.	.	8.47
58	0.67367	-0.1734	.	.	.	2.87
62	0.57916	-2.1789	0.9338	.	.	112.47
66	0.79334	-0.2268	1.4416	.	.	170.99
71	0.77354	-1.0750	1.3177	.	.	42.90
75	0.74439	-1.8100	-0.8115	.	.	16.55
<b>N=54482 M1=54.7387 M2=508.2763 Critical Z=145.29</b>						

**Table 113. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 6 Reading**

Item	a	b	c	Fit-Z
5	0.64589	-2.2375	0.2000	7.18
7	1.32867	-0.4386	0.3246	9.76
8	0.97682	1.1960	0.2029	22.60
9	0.76421	1.1618	0.4092	1.20
10	0.50693	-0.1683	0.1321	6.91
13	1.00702	0.2869	0.2360	11.70
14	0.82498	-0.2670	0.1862	2.50
15	0.83795	-1.1300	0.1639	2.37
16	0.60864	-1.5945	0.1975	35.25
17	0.78541	-2.1856	0.1975	13.06
19	0.94779	-1.3406	0.3259	-0.25
20	0.89262	-1.2102	0.2000	28.42
21	0.56532	-1.6908	0.0899	20.70
22	0.64324	-1.6239	0.2000	1.71
23	0.54993	-0.4569	0.0346	40.32
25	1.19964	-0.5378	0.1016	9.93
26	1.07617	-2.0120	0.1670	7.15
28	0.38459	-0.3506	0.1975	4.44
30	0.30928	-1.3068	0.2000	53.82
31	0.52615	-1.5921	0.2000	38.55
33	0.79242	-0.5435	0.2545	11.91
34	0.63161	-1.6378	0.0774	0.92
35	0.83895	-1.5922	0.2000	12.60
37	1.08256	0.2860	0.4070	6.27
38	0.85378	0.1040	0.2790	8.48
39	0.75106	0.2370	0.2193	7.29
40	0.47478	-1.8273	0.0000	29.20
41	0.82761	-0.0582	0.1883	7.50
42	0.96850	0.5725	0.2508	12.34
43	0.89870	0.2609	0.2692	13.10
44	1.06481	-0.5995	0.2806	7.61
45	1.15710	-0.1153	0.2269	8.38
46	1.12181	-0.7495	0.1669	3.03
47	0.82090	-0.5211	0.2614	5.12
48	0.86196	-1.6568	0.2033	12.92
49	1.41378	-1.6254	0.2155	19.42
50	1.07650	-2.2260	0.0911	15.64
95	0.43034	-0.6275	0.2000	25.42
96	0.80031	0.3264	0.2845	2.91
97	0.91235	0.5188	0.2729	14.69
98	0.57824	-1.5251	0.1975	21.56
99	1.64152	-1.1290	0.2392	7.95
100	0.45764	0.3906	0.0747	0.80
101	1.07129	-1.4764	0.2093	8.32
102	0.69377	0.6592	0.1860	30.10
103	0.61328	-1.7914	0.2000	30.59
104	0.97661	-2.5528	0.2000	15.36

continued

**Table 113. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 6 Reading (Concluded)**

Item	a	b	c	Fit-Z
105	0.78624	-0.5592	0.2372	2.83
107	1.11137	0.5948	0.2384	8.72
108	1.07299	1.0215	0.3685	8.06
109	0.84376	-0.1302	0.3237	1.44
112	0.77428	-1.3413	0.1115	1.73
113	1.20545	0.2096	0.2651	10.09
114	1.51008	-0.6480	0.1918	16.56
115	1.18516	0.1687	0.3512	9.60
116	0.87883	-2.0033	0.0748	12.30
<b>N=58983 M1=56.37 M2=639.5593 Critical Z=157.29</b>				

**Table 114. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 6 Reading**

Item	f	g1	g2	g3	g4	Fit-Z
4	0.68088	0.2214	0.2995	.	.	38.45
6	0.55455	-1.6164	1.0112	0.7089	.	41.41
11	0.52802	0.3411	-0.1407	0.9966	.	64.50
12	0.54904	1.0883	-2.2389	-0.9183	.	211.12
18	0.86556	-0.9569	0.2570	.	.	14.15
24	0.83521	-0.3988	-0.4125	.	.	19.76
29	1.01130	-0.4296	1.8130	.	.	39.45
32	0.73676	1.1828	0.3893	1.6423	.	50.85
36	0.68608	-0.2041	0.0116	.	.	47.23
93	0.69175	-1.0955	0.1252	0.5742	.	60.79
94	1.07265	-0.6600	-0.7082	.	.	21.16
106	0.56984	-0.8328	-0.0048	0.7218	1.4054	5.28
110	1.17550	-0.1103	1.2713	.	.	22.94
111	0.82655	-0.7279	2.0832	.	.	18.70
<b>N=58983 M1=56.37 M2=639.5593 Critical Z=157.29</b>						



**Table 115. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 6 Writing**

Item	a	b	c	Fit-Z
51	0.91836	-1.5281	0.1993	9.54
52	0.47860	-2.5127	0.2000	12.15
53	1.02384	-0.8362	0.3312	9.20
54	0.76448	-1.7858	0.1597	1.31
55	1.10500	-1.7987	0.2000	16.20
56	1.00262	-1.3759	0.1163	17.54
57	0.43208	0.4243	0.0613	4.00
58	0.55914	-1.4031	0.2000	62.31
59	0.74213	0.7412	0.2250	20.74
60	0.33078	-0.7380	0.2000	5.27
61	1.03260	-0.6730	0.1568	8.83
62	1.16316	-1.6509	0.1895	10.05
63	0.79011	0.7595	0.2718	4.41
64	0.79751	-1.6432	0.2000	2.23
65	1.16580	-0.9772	0.1957	7.62
66	1.26982	-1.3138	0.1573	14.49
67	1.45763	-0.4015	0.1741	21.22
68	1.42388	-0.3629	0.2528	19.17
69	1.13329	-1.0021	0.2490	3.99
70	0.78644	-0.6001	0.1384	1.94
71	1.12365	0.5246	0.3367	17.75
72	1.47654	-0.8720	0.2768	20.77
73	1.32434	-0.6922	0.2159	10.71
74	0.46640	-0.9723	0.0965	12.89
75	0.75504	-0.8491	0.2468	-0.66
76	0.53632	-0.5101	0.1612	3.69
78	0.56625	-0.1839	0.1861	69.19
79	0.30454	-1.4495	0.2000	5.21
80	0.60606	0.2003	0.1354	1.43
81	0.30571	-1.0485	0.0000	1.45
82	0.59999	-0.2749	0.2347	4.25
83	0.70523	-1.0183	0.0626	25.84
84	0.78715	-0.3133	0.2533	10.81
85	0.77536	-0.1695	0.2185	9.56
86	0.52310	-0.1718	0.0634	13.01
87	0.62497	0.1418	0.2576	11.07
88	1.14839	-0.9701	0.2268	6.09
89	0.48385	-0.1732	0.0998	11.09
90	0.96754	-0.8660	0.1500	36.73
91	1.53606	-1.2003	0.2451	9.88

**N=58803 M1=55.2981 M2=527.5816 Critical Z=156.81**

**Table 116. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 6 Writing**

Item	f	g1	g2	g3	g4	Fit-Z
1	1.11279	-5.4592	.	.	.	4.75
2A	0.79274	-1.0862	.	.	.	9.63
2B	1.08238	-0.6696	.	.	.	5.98
2C	0.73735	-1.4054	.	.	.	29.56
2D	1.13344	-1.3379	.	.	.	6.33
2E	0.81146	0.3300	.	.	.	11.71
2F	1.19628	-2.2337	.	.	.	20.22
3A	1.39387	-3.9858	-3.9547	-0.4213	2.8695	205.87
3B	1.55456	-6.1882	-3.8861	-0.1655	3.0066	46.42
3C	1.80791	-6.9044	-3.6230	.	.	7.14
27	0.58989	-0.6270	-2.5046	-0.3508	2.1417	250.52
77	0.79174	-2.3416	-2.9844	-0.6384	1.6316	91.33
92	0.83181	-1.4812	-3.1021	-0.3040	2.0561	233.71
<b>N=58803 M1=55.2981 M2=527.5816 Critical Z=156.81</b>						

**Table 117. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 6 Mathematics**

Item	a	b	c	Fit-Z
1	0.72446	-2.1838	0.2135	35.57
2	0.90484	-1.4867	0.2135	16.97
3	0.92824	0.5456	0.2913	5.18
5	0.70663	-0.1856	0.2135	90.29
6	1.28262	-0.2894	0.2476	4.68
8	0.38044	-1.8361	0.2000	350.91
9	1.12997	0.5516	0.4109	35.71
10	0.60344	-1.8852	0.1044	-0.15
11	0.87172	0.2598	0.1757	2.69
12	0.56338	-0.1944	0.2135	42.86
14	0.52202	-3.1692	0.2000	2.62
15	1.03108	-0.1476	0.3392	2.97
17	1.27930	-0.1059	0.2060	4.96
18	1.32874	0.5111	0.1076	15.82
19	0.75380	0.1207	0.3116	23.67
21	1.14083	0.5375	0.1368	5.26
22	0.80299	0.4436	0.0352	5.34
24	0.83530	-2.0244	0.0670	6.24
25	0.83661	-0.9266	0.1622	47.53
26	0.77180	-0.1016	0.4992	10.17
27	1.14469	0.6356	0.1787	4.37
28	0.91156	-1.3971	0.3152	2.73
30	0.97821	-0.0349	0.2257	2.16
31	0.99592	-0.4089	0.1587	2.66
32	0.87482	-0.8819	0.3177	2.17
34	0.71681	-1.0787	0.2390	8.04
35	0.46211	-2.4241	0.2000	2.59
36	0.66962	-0.3905	0.1701	4.30
38	1.41367	1.5531	0.2935	61.97
39	1.23559	0.8633	0.4440	23.32
41	0.65516	-0.5574	0.0554	35.83
42	0.24857	0.4689	0.2639	6.79
44	0.90024	0.5773	0.2701	8.24
45	1.17147	0.3987	0.2095	32.05
47	1.06640	0.0669	0.2246	8.61
48	0.79796	-1.0577	0.0914	6.13
50	1.52944	-0.2573	0.3178	5.89
51	1.23935	0.5567	0.4495	10.98
52	0.43188	-3.5092	0.2000	23.21
53	0.94332	0.9296	0.4565	4.95
54	0.68291	0.8769	0.2204	-0.02
55	0.73934	-1.3252	0.2000	5.15
56	0.97180	-0.4956	0.2289	2.11
58	0.97405	-0.1361	0.3116	0.06
59	0.77333	-0.0224	0.1094	5.29

**N=55768 M1=62.3487 M2=552.5822 Critical Z=148.71**

**Table 118. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 6 Mathematics**

Item	Part	f	g1	g2	g3	g4	Fit-Z
4	0.74807	-2.8135	-1.6123	.	.	10.95	4
7	0.72702	-3.4102	-1.4892	-0.8924	.	10.15	7
13	1.29453	0.4100	0.8315	.	.	84.69	13
16	0.79848	-0.2778	1.2073	-1.3391	.	38.70	16
20	0.83613	-2.8933	-0.3586	0.3417	1.5925	22.54	20
23	0.77404	1.1057	-1.9007	.	.	24.73	23
29	0.61439	-0.6702	-0.0189	0.4172	.	192.90	29
33	0.79340	-0.7756	-0.7372	.	.	76.03	33
37	0.58654	-1.3080	-0.5156	-1.4422	.	123.17	37
40	0.79369	-1.4377	0.8149	1.6809	0.5796	309.57	40
43	0.92694	-0.4935	-1.7633	.	.	16.41	43
46	0.97423	-0.6394	-0.6862	.	.	207.92	46
49	0.74881	-1.0443	0.6749	-0.1494	.	208.76	49
57	0.81611	-0.9377	0.7359	2.2257	.	41.26	57
60	1.28173	-3.5052	-1.4386	-0.7061	0.8630	104.97	60
<b>N=55768 M1=62.3487 M2=552.5822 Critical Z=148.71</b>							

**Table 119. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 7 Reading**

Item	a	b	c	Fit-Z
7	0.38447	-1.6816	0.2000	2.12
8	0.76885	-1.6671	0.1955	4.31
9	1.08065	-2.0571	0.1986	7.87
10	0.92419	-2.0164	0.2000	9.77
14	0.56885	-1.0237	0.1732	3.51
15	1.23269	-1.8031	0.2434	5.14
16	0.47531	-0.7851	0.1918	18.87
17	0.42790	1.6700	0.2479	5.04
18	1.08119	-0.3563	0.1659	16.16
19	0.74742	-0.3708	0.3361	10.30
20	0.78984	-0.6879	0.2007	3.17
21	1.34735	-0.4858	0.2892	14.56
22	0.40291	0.1077	0.1918	27.62
23	0.58869	-0.8929	0.1392	12.81
24	0.13107	1.8219	0.2000	9.73
26	0.94111	1.1411	0.1630	16.83
27	0.87932	-1.0955	0.2105	22.07
28	0.43099	-0.3744	0.0862	14.15
29	0.63627	0.1534	0.2233	7.55
30	0.72857	-1.1366	0.2842	14.43
31	0.43875	-2.3487	0.1918	11.01
32	0.75375	-0.0255	0.1992	12.16
33	0.73332	-0.6508	0.1162	2.39
35	0.69354	-1.3266	0.1918	101.68
36	0.89252	-2.1502	0.1582	7.32
38	1.16568	-1.2982	0.3560	0.84
39	0.28193	-0.5634	0.2000	119.53
41	1.14255	1.4347	0.2434	86.51
42	0.64978	-1.4230	0.2000	37.33
43	0.86974	-0.9977	0.3231	2.04
44	0.82662	-1.5829	0.1976	1.57
45	0.97332	-0.7963	0.2309	6.15
46	0.77766	-1.8590	0.0929	1.21
91	0.82906	1.1509	0.1689	39.70
92	0.51265	-0.8526	0.2105	18.12
93	0.83458	-0.7862	0.2049	8.53
94	0.59179	0.2885	0.1612	9.83
95	0.63829	-1.5541	0.2000	2.66
96	0.64682	-2.1573	0.2000	7.03
97	0.99077	-2.7289	0.2000	13.22
98	1.13778	0.6209	0.3906	19.34
100	0.83315	-0.7260	0.2307	2.37
101	1.23880	0.2772	0.2651	16.77
102	0.92376	-0.4705	0.3276	2.55
103	0.72151	-0.3527	0.3234	3.31
104	0.53932	-1.7373	0.1004	11.48

continued

**Table 119. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 7 Reading (Concluded)**

Item	a	b	c	Fit-Z
105	0.88853	-0.7227	0.3168	10.18
106	0.55511	-1.0827	0.2290	1.53
107	0.62462	-1.9108	0.1918	7.46
108	0.53657	-0.8322	0.1280	8.41
109	0.52533	-1.5304	0.1085	1.82
110	0.69523	-0.6728	0.1585	4.24
113	0.76124	-1.5264	0.1318	6.72
114	1.27494	0.0771	0.2848	15.93
115	1.08678	-0.3017	0.3338	15.38
116	0.99790	-2.0375	0.1266	6.59

**N=58041 M1=54.6676 M2=651.1678 Critical Z=154.78**

**Table 120. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 7 Reading**

Item	f	g1	g2	g3	g4	Fit-Z
4	0.76090	-0.9945	-0.8708	-0.5046	.	25.31
5	0.52042	-1.4156	-0.8746	.	.	94.89
6	0.55726	-0.4298	0.7183	2.2490	.	154.58
11	0.69295	-0.8218	-1.1134	.	.	22.80
12	0.91058	-1.2734	0.7838	.	.	25.29
13	0.86245	-0.4664	-1.4947	.	.	69.75
25	0.86244	-2.1224	0.9056	1.6139	1.4148	121.73
34	0.68816	-0.0513	1.0486	.	.	22.71
37	0.72687	-1.9834	1.2419	.	.	33.02
40	0.70765	-0.5183	0.9162	.	.	27.59
90	0.57162	0.6080	0.4462	0.1014	.	130.83
99	0.52119	-0.9682	-0.1455	0.5526	1.3023	22.32
111	1.18823	-0.3615	1.2657	.	.	26.62
112	0.83309	-0.7356	2.0649	.	.	50.92

**N=58041 M1=54.6676 M2=651.1678 Critical Z=154.78**

**Table 121. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 7 Writing**

Item	a	b	c	Fit-Z
48	0.63672	-1.2910	0.2000	9.79
49	0.89355	0.2003	0.1587	6.88
50	0.75399	-1.9086	0.2241	12.20
51	0.92295	-1.5352	0.1098	2.17
52	1.24874	-0.5920	0.3026	11.76
53	0.64641	-0.2701	0.2337	5.75
54	0.35010	-0.3870	0.1210	10.32
55	0.99100	-1.4689	0.1153	10.46
56	0.99587	-1.5140	0.2791	7.24
57	0.96928	-1.0574	0.2445	3.30
58	0.96771	-1.1324	0.2345	1.81
59	0.98107	0.3395	0.1916	11.21
60	0.89436	-1.1307	0.1428	9.92
61	0.73538	-1.0267	0.1557	16.22
62	0.64968	-1.0639	0.1115	30.48
63	0.54407	-0.4213	0.4968	21.64
64	0.73750	0.2097	0.1745	1.06
65	0.65294	-0.7836	0.2000	2.94
66	0.73426	0.2385	0.1169	4.95
67	0.87798	-1.9354	0.0779	34.95
69	0.98582	-0.6877	0.1151	11.04
70	0.44938	-0.6498	0.2000	97.67
71	0.62195	-0.0241	0.1924	2.35
72	1.13732	-0.6421	0.2216	10.81
73	0.56627	-1.1073	0.2000	9.32
74	0.98503	0.8253	0.2523	11.51
75	0.90364	0.8348	0.3324	5.65
76	1.08705	0.6851	0.2096	22.34
77	0.84055	0.2106	0.3180	2.67
78	0.46605	0.4026	0.2000	8.72
79	0.53408	0.0242	0.0326	39.40
80	1.76471	-1.3460	0.3664	10.92
81	0.50612	-0.7628	0.1770	32.57
82	0.56511	-0.3960	0.1724	16.95
83	1.17893	-0.5006	0.1735	10.94
84	1.52535	-1.2989	0.2592	22.06
85	1.50914	-0.8855	0.1851	12.77
86	1.24861	-0.7704	0.2351	7.39
87	1.35421	-1.4173	0.2611	8.19
88	1.10716	-0.8957	0.1305	5.82
<b>N=57851 M1=63.297 M2=557.9989 Critical Z=154.27</b>				

**Table 122. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 7 Writing**

Item	f	g1	g2	g3	g4	Fit-Z
1	0.96459	-5.0558	.	.	.	2.93
2A	1.20842	-3.1503	.	.	.	21.35
2B	1.25599	-2.6495	.	.	.	7.74
2C	0.96932	0.1754	.	.	.	17.89
2D	1.01115	1.5132	.	.	.	9.56
2E	0.71012	-2.6753	.	.	.	4.49
2F	0.83311	0.1890	.	.	.	181.51
3A	1.14551	-2.9701	-3.7105	-1.0777	1.9518	215.40
3B	1.25527	-5.1252	-3.7338	-0.7910	2.0254	19.00
3C	1.64577	-6.3306	-3.7871	.	.	10.67
47	0.93484	-2.9221	-3.6199	-0.5787	2.2535	45.11
68	0.86972	-2.5996	-3.4388	-0.0145	2.8740	72.79
89	0.83057	-1.9825	-3.2102	-0.2165	2.5523	141.74
<b>N=57851 M1=63.297 M2=557.9989 Critical Z=154.27</b>						



**Table 123. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 7 Mathematics**

Item	a	b	c	Fit-Z
1	0.78994	-0.1099	0.2606	26.31
2	0.81327	-0.0770	0.1606	3.68
4	1.33569	0.4236	0.1055	14.86
5	0.61244	-0.2176	0.2606	0.28
6	1.23466	1.4560	0.3301	31.73
8	0.73806	1.1049	0.3581	3.71
9	1.00026	0.1853	0.1747	4.74
10	0.47166	-0.3879	0.0573	1.28
12	0.67552	-0.4799	0.2182	66.34
13	0.61630	1.6705	0.3160	3.92
15	1.32113	1.7216	0.1362	7.39
16	0.75326	-1.0784	0.0574	3.07
17	0.70019	1.0275	0.1078	7.39
18	0.09504	1.7804	0.2000	146.77
19	0.77763	-0.0270	0.3103	1.61
21	0.35089	1.6816	0.4439	12.38
22	1.50995	-0.4098	0.4832	5.49
23	1.21561	-0.1843	0.3266	2.95
24	0.79566	-2.1564	0.2000	15.54
26	0.72983	-1.3220	0.2000	7.43
27	0.96847	-0.0352	0.2133	5.07
28	1.06990	0.0944	0.3022	7.02
30	0.27575	-0.2582	0.2000	9.53
31	0.79608	0.4465	0.0693	16.79
32	1.19936	0.8731	0.1350	9.52
34	0.95976	0.2257	0.3313	7.53
36	1.15550	0.5884	0.2382	2.90
37	0.76767	1.4837	0.2608	17.74
38	0.38538	-0.0070	0.2438	4.05
39	1.40357	0.6525	0.1312	14.02
41	0.22293	0.5159	0.1597	5.41
42	1.37723	0.8106	0.4913	13.86
43	1.17407	0.4497	0.3474	1.04
44	0.94879	1.3563	0.1820	19.03
46	0.72764	-1.6260	0.1002	5.99
47	0.97736	-1.2875	0.0447	9.17
48	0.87904	-0.1094	0.4993	11.87
50	0.59455	0.4723	0.2386	2.46
52	0.70064	-0.3951	0.0699	8.01
53	0.60950	-1.5270	0.0926	3.60
54	0.78212	-0.0287	0.1689	16.82
56	1.47151	1.4039	0.2715	22.28
57	1.14351	1.8670	0.2045	23.17
58	0.73251	1.0042	0.1138	0.26
59	1.05419	0.0577	0.2858	9.35

**N=55543 M1=62.9031 M2=556.6756 Critical Z=148.11**

**Table 124. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 7 Mathematics**

Item	f	g1	g2	g3	g4	Fit-Z
3	1.39969	0.2610	0.5329	.	.	146.52
7	0.76532	-0.8949	0.7343	2.1410	.	30.28
11	1.00354	-0.1149	-0.4429	.	.	26.51
14	1.36787	-0.3398	0.6209	1.2853	.	14.54
20	0.94376	-0.3997	1.0136	1.4576	0.8789	150.45
25	0.65464	-0.5264	-0.6938	.	.	61.52
29	1.16543	-1.0275	0.7719	2.5026	.	15.47
33	0.47562	-1.7399	0.5335	.	.	120.72
35	1.29163	-2.3674	-1.6358	0.8258	.	104.76
40	1.09658	1.4476	0.5492	1.4269	0.1922	86.71
45	1.26841	0.5050	1.2794	.	.	54.75
49	1.54199	0.2175	2.0026	2.4725	.	16.02
51	1.02479	1.8003	0.0958	.	.	14.54
55	1.25673	-0.9540	0.4370	0.8597	.	106.69
60	0.46943	1.3198	-2.3054	1.0999	-0.1043	91.78
<b>N=55543 M1=62.9031 M2=556.6756 Critical Z=148.11</b>						

**Table 125. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 8 Reading**

Item	a	b	c	Fit-Z
4	0.31058	-2.4732	0.2000	11.15
5	0.74572	-1.8500	0.2000	7.73
7	0.73381	-0.5986	0.1794	11.75
8	0.52287	-1.4021	0.1075	25.37
9	0.80239	-0.2888	0.2141	16.89
10	0.66469	-1.0137	0.2550	4.39
11	0.99900	1.0236	0.3133	11.48
12	0.71028	0.9687	0.2020	6.22
15	0.38758	-2.6081	0.2000	68.02
16	0.93509	0.7951	0.1710	35.23
17	0.39027	-0.5279	0.2000	24.90
18	0.82415	-1.6897	0.1332	4.49
19	0.76366	-1.2798	0.2443	8.41
20	0.82882	-1.9734	0.2000	5.58
23	0.43360	-0.2767	0.2000	189.38
25	0.31706	-0.7795	0.2000	29.68
26	0.91850	-1.5961	0.2142	7.11
27	0.94245	0.8386	0.2237	8.97
29	0.51123	-2.5109	0.2000	10.04
31	0.51447	-0.7063	0.0841	1.19
32	0.65903	-1.8711	0.2000	10.97
33	0.72132	-0.6889	0.2112	3.53
34	0.56498	0.0931	0.1533	10.96
35	0.85013	-1.7623	0.1436	3.62
36	0.90875	-1.6944	0.2000	17.87
37	0.22219	0.3495	0.2000	111.13
39	1.22738	-1.3558	0.3810	3.26
41	0.71613	-1.1813	0.1899	250.82
43	1.09209	1.1805	0.2624	47.04
44	0.42236	0.5072	0.2128	3.66
45	0.49523	0.8906	0.1905	6.78
46	0.18848	2.9019	0.1928	3.68
48	0.35798	1.6720	0.1192	6.15
49	0.73666	0.0223	0.0726	6.27
50	.	.	.	.
94	0.73974	0.7625	0.1778	24.16
95	0.51709	-1.2092	0.2000	18.81
96	0.86195	-1.0210	0.2169	14.05
97	1.14372	-0.9204	0.1763	7.65
98	1.25343	-0.3357	0.2795	11.03
99	0.72229	-0.0223	0.2664	3.22
100	0.57052	0.0823	0.1369	2.37
101	1.07073	-1.3399	0.1912	1.44
102	0.57581	-1.9191	0.0932	2.18
103	0.53330	-0.5601	0.1086	3.21
105	0.53509	0.9213	0.4867	11.42
106	1.02610	0.3393	0.3099	8.02
107	0.80942	-0.0601	0.2933	3.51

continued

**Table 125. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 8 Reading (Concluded)**

Item	a	b	c	Fit-Z
108	0.88338	0.0194	0.3160	12.65
110	0.78306	-1.3458	0.1899	86.05
111	0.66507	-0.7361	0.1473	19.52
112	0.73143	-0.6938	0.2927	1.14
113	0.77995	-1.9644	0.1899	23.20
114	1.06351	-1.1778	0.2406	13.14
115	0.41058	-0.6618	0.0783	18.64
116	0.76790	-0.5831	0.2124	4.43

**N=57409 M1=51.069 M2=660.8064 Critical Z=153.09**

**Table 126. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 8 Reading**

Item	f	g1	g2	g3	g4	Fit-Z
6	0.72487	-0.3729	0.4550	.	.	4.86
13	0.69310	-2.2398	0.3865	1.0401	.	30.57
14	0.78363	-1.8916	-2.0125	.	.	16.14
22	0.88773	-1.6324	0.4766	.	.	5.02
24	0.84610	-0.0804	1.2503	2.3239	.	13.63
28	0.52679	-0.6676	-0.9470	-0.0365	.	175.55
30	0.90295	1.1168	-1.3862	.	.	124.91
38	0.75273	-0.0684	1.0352	.	.	17.33
40	0.93960	-1.3194	0.3032	1.1117	.	93.05
42	0.64845	-1.5748	1.2992	.	.	68.05
47	0.79666	-0.0989	1.3593	1.1347	.	35.79
93	0.52662	0.3943	0.4336	-0.1970	.	153.34
104	1.22518	-0.7867	2.1133	.	.	64.60
109	0.85187	-0.8887	-0.7581	-0.5232	.	53.33

**N=57409 M1=51.069 M2=660.8064 Critical Z=153.09**

**Table 127. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 8 Writing**

<b>Item</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>Fit-Z</b>
51	1.02126	-0.7495	0.2394	2.70
52	0.70880	-0.1626	0.1714	12.65
53	0.66153	-0.0730	0.2305	3.28
54	1.02491	-0.7393	0.3884	1.54
55	0.59844	-1.2153	0.0877	2.83
56	1.05109	1.5950	0.2288	17.89
57	1.25970	-1.1968	0.2324	6.10
58	0.83048	-1.3442	0.1296	3.11
59	1.00137	0.0501	0.1903	5.74
60	0.83689	-1.3258	0.1060	10.03
61	0.73609	0.1597	0.1411	8.75
62	0.76393	-1.2266	0.2693	0.87
63	1.14490	-0.8204	0.2167	7.38
64	0.61512	-0.8361	0.0885	15.44
65	0.73594	-0.6938	0.2826	2.97
66	0.89427	-1.5515	0.2066	1.41
67	1.06966	1.0801	0.0907	18.54
68	0.79625	-1.4390	0.1520	11.91
69	0.83203	-0.9512	0.2211	8.74
70	1.02643	-1.5860	0.0661	29.08
71	0.47780	1.1015	0.4085	17.81
72	1.12429	-1.5967	0.2060	4.89
73	0.70433	-0.9696	0.2487	-0.64
75	0.84128	-1.3366	0.2000	43.46
76	0.80106	0.1506	0.1491	13.92
77	0.75602	-0.6432	0.2267	3.16
78	1.06794	-0.9897	0.2288	3.65
79	1.02903	-0.7958	0.1420	28.66
80	1.10420	1.5263	0.2574	36.53
81	0.57339	-0.9786	0.1029	5.79
82	0.87532	0.4161	0.1685	26.78
83	0.49699	-0.5097	0.2000	46.58
84	0.73810	-1.3257	0.2000	132.45
85	0.84653	-0.3449	0.2585	2.43
86	0.80137	-0.6287	0.2442	6.48
87	1.42141	-1.1272	0.1828	12.61
88	1.05609	0.4214	0.2754	12.82
89	0.86596	0.0973	0.2530	8.20
90	0.84254	1.3449	0.2165	43.89
91	0.54223	0.5367	0.1235	14.53

**N=57281 M1=64.2366 M2=566.1437 Critical Z=152.75**

**Table 128. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 8 Writing**

Item	f	g1	g2	g3	g4	Fit-Z
1	1.04372	-5.4509	.	.	.	2.65
2A	0.74239	-1.4606	.	.	.	4.76
2B	1.34793	-2.0223	.	.	.	1.27
2C	0.96746	-1.2484	.	.	.	15.83
2D	0.70439	-1.2763	.	.	.	58.22
2E	1.16896	-0.8885	.	.	.	3.37
2F	0.98001	-0.6194	.	.	.	3.41
3A	1.14997	-2.7735	-3.3478	-1.2165	1.1032	774.67
3B	1.40017	-5.7117	-3.8633	-1.1939	1.1643	40.04
3C	1.91647	-7.2064	-4.4015	.	.	8.92
21	0.96299	-2.2603	-3.5041	-0.4467	2.1859	93.95
74	0.91634	-2.2555	-3.7141	-0.1314	2.6343	87.39
92	0.85507	-1.4845	-3.4074	0.3894	2.5154	178.23
<b>N=57281 M1=64.2366 M2=566.1437 Critical Z=152.75</b>						

**Table 129. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 8 Mathematics**

Item	a	b	c	Fit-Z
1	1.17779	-0.5885	0.3843	3.14
2	0.53738	1.7421	0.3237	3.29
3	1.05570	-1.1184	0.3109	4.94
5	0.89126	0.7014	0.1073	28.55
6	1.22844	0.1673	0.3251	7.24
7	1.02334	-0.6786	0.2846	2.63
9	0.95061	-0.5265	0.1233	13.63
10	0.61496	0.1704	0.3262	8.15
11	1.12836	-0.3839	0.2399	4.82
12	1.03040	0.7692	0.2234	2.80
14	0.69548	0.7679	0.2477	1.24
15	1.17992	2.1482	0.2749	10.14
16	1.37903	0.9299	0.1912	54.06
18	1.41071	0.9717	0.1261	51.13
19	0.58277	1.1936	0.1010	4.32
21	1.07270	0.6532	0.2786	1.35
22	0.71089	1.6588	0.3732	10.54
23	1.20979	0.4600	0.2009	2.08
25	0.47447	0.2988	0.1118	13.45
27	0.39791	-0.9237	0.2000	2.77
28	0.36102	-1.9734	0.2000	29.50
29	1.21263	-0.3604	0.4218	4.15
31	1.06910	0.9040	0.2688	20.63
32	0.47539	-0.3288	0.1802	15.43
33	0.89649	0.5655	0.0646	22.75
35	0.57691	0.6530	0.2153	80.81
36	0.76241	0.5922	0.3564	-0.63
37	0.79878	-0.1492	0.2392	1.27
38	0.84030	0.1657	0.0386	7.69
39	0.71934	0.8879	0.2388	7.93
41	1.19002	0.7984	0.3026	26.11
42	1.28731	0.4101	0.0979	9.44
43	0.92753	0.2980	0.2414	0.97
45	1.31330	0.9462	0.2696	23.64
46	0.78773	-1.4025	0.0593	17.76
47	1.61099	0.7367	0.3217	6.34
49	1.56160	0.0279	0.1337	11.78
50	0.24851	-3.4863	0.2000	10.38
52	0.32346	0.1029	0.1816	0.73
53	0.69460	0.8570	0.1569	32.86
54	0.71794	-0.6364	0.2000	38.08
56	1.27091	0.0713	0.1342	16.37
57	1.32858	0.9569	0.3008	4.31
58	0.72247	0.8144	0.1069	0.48
59	0.96696	-0.3294	0.2631	17.01

**N=55238 M1=60.4809 M2=586.1943 Critical Z=147.30**

**Table 130. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 8 Mathematics**

Item	f	g1	g2	g3	g4	Fit-Z
4	0.66118	-1.8790	-0.9283	0.0104	.	71.59
8	1.01998	-0.4344	-0.8255	.	.	43.12
13	0.87379	0.1376	0.3642	3.4435	.	126.60
17	0.91479	2.9638	-0.7421	.	.	43.36
20	0.90221	-0.5096	0.9676	0.9585	0.4953	105.24
24	1.53461	-1.7911	1.5861	.	.	79.68
26	0.99301	0.4187	0.7630	3.1208	.	10.37
30	0.91994	0.7337	1.6941	.	.	230.44
34	1.11483	-0.4032	-1.0202	0.9606	.	256.17
40	1.00653	-2.3298	-2.6326	0.7609	1.3776	239.38
44	0.55556	-2.2296	-0.0427	.	.	83.28
48	0.90762	-1.2693	-1.2775	0.8743	.	225.89
51	1.19688	0.3770	0.1983	.	.	25.60
55	0.97132	-0.4837	0.1848	1.8944	.	34.60
60	0.67417	1.0267	-1.3379	0.8582	-0.8050	123.46
<b>N=55238 M1=60.4809 M2=586.1943 Critical Z=147.30</b>						



**Table 131. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 8 Science**

Item	a	b	c	Fit-Z
1	1.20458	0.0510	0.2950	17.75
2	0.32596	0.3533	0.1263	4.18
3	0.44254	0.5347	0.1946	0.21
5	0.58589	0.5386	0.2077	3.15
6	0.92765	0.9753	0.3253	9.14
7	0.93600	0.6607	0.1882	3.06
8	0.47181	-0.4401	0.0839	26.39
9	0.65492	0.0273	0.0749	7.35
10	0.66124	1.2304	0.1619	2.91
12	1.13893	0.8090	0.3637	5.76
13	0.59294	0.9752	0.2696	2.06
15	0.81602	1.0615	0.1243	21.24
16	0.54439	1.0265	0.3420	5.23
17	0.55545	-0.5558	0.2000	31.08
18	1.00505	0.5197	0.1819	10.76
19	0.66016	-0.5965	0.0469	4.10
27	1.02179	1.5880	0.2666	10.92
28	0.89801	0.1845	0.3099	8.38
29	0.85908	0.8241	0.3095	-0.27
30	0.99921	-1.1660	0.1070	16.76
31	0.56994	2.0841	0.2585	1.98
32	0.60144	0.8648	0.4132	0.39
34	0.59990	0.7364	0.2635	3.53
35	0.93792	1.8777	0.2646	17.23
36	1.10042	1.4140	0.1151	27.40
38	0.86489	0.3796	0.1333	4.04
39	0.86380	0.7426	0.2908	4.75
40	0.74241	2.1442	0.1458	1.82
41	0.70826	2.2610	0.2090	19.39
42	0.84858	-0.2664	0.1625	11.39
44	0.91881	-0.8091	0.0619	0.55
45	0.70863	0.5884	0.1863	4.00
46	0.44945	-0.3049	0.2000	28.63
48	0.51388	-0.1711	0.2000	9.45
49	1.23611	0.1502	0.1074	6.10
51	0.86734	0.4080	0.1007	1.48
52	0.56371	0.5223	0.3061	13.41
53	0.24075	0.5039	0.2000	10.66
54	0.53089	-0.2380	0.2000	3.20
55	1.09918	0.5057	0.3769	10.65
56	0.41168	-1.3079	0.2000	55.60
57	0.71278	0.2349	0.3355	3.48
59	0.66782	1.1521	0.2540	1.38
60	0.55267	0.3791	0.1740	2.59
61	0.38526	-1.1483	0.2000	0.56
62	0.45941	2.0477	0.1821	11.99
64	1.55619	0.6453	0.2203	62.47
65	0.57754	1.1318	0.1512	2.84
67	0.72111	0.3716	0.1611	2.06

continued

**Table 131. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 8 Science (Concluded)**

Item	a	b	c	Fit-Z
68	0.76194	-1.2050	0.2000	141.77
69	0.83870	0.2640	0.2633	2.40
72	0.87118	0.5559	0.1590	31.42
74	0.86387	1.2291	0.2407	22.49
75	0.26488	-0.0556	0.2000	15.30
76	0.93386	0.6445	0.1339	6.77
78	0.85936	1.1455	0.2962	6.88
79	0.29250	0.8757	0.2000	14.07
80	0.58388	1.0374	0.0623	1.22
81	0.94243	0.4246	0.2371	3.03
83	0.54962	1.1578	0.2830	1.64

**N=55205 M1=52.6809 M2=505.1751 Critical Z=147.21**

**Table 132. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 8 Science**

Item	f	g1	g2	g3	g4	Fit-Z
4	0.38196	0.8008	.	.	.	2.04
11	0.98970	0.6839	.	.	.	19.08
14	1.12489	-0.4070	.	.	.	37.26
20	1.23940	-0.0064	.	.	.	7.22
21	0.80657	-0.7955	.	.	.	28.33
22	0.86120	-0.6074	-0.1923	.	.	20.16
23	0.90615	-0.8087	.	.	.	35.89
24	0.48032	0.0297	-0.1121	-0.3306	0.2422	11.03
25	1.28879	-1.0432	-0.3720	.	.	17.94
26	0.65492	-0.7817	-0.7902	.	.	107.83
33	1.10873	-0.1573	3.8642	.	.	11.28
37	1.28354	-1.9327	-1.0377	0.3435	.	72.06
43	0.60733	0.2016	2.7015	.	.	9.34
47	1.12574	2.6729	.	.	.	14.36
50	0.94910	-0.5937	1.5560	.	.	125.60
58	0.70299	1.5278	.	.	.	2.99
63	0.37810	0.9118	0.5317	.	.	283.59
66	1.39689	0.2396	.	.	.	3.00
70	1.28112	-0.4131	0.9921	.	.	74.06
71	0.92882	0.2891	1.2430	.	.	49.93
73	0.50378	0.3015	2.1485	.	.	213.01
77	1.01777	-1.1129	0.3748	.	.	16.28
82	1.05731	-0.4627	2.1437	.	.	16.32

**N=55205 M1=52.6809 M2=505.1751 Critical Z=147.21**

**Table 133. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 9 Reading**

Item	a	b	c	Fit-Z
5	0.28797	-0.8076	0.2000	18.15
6	0.84906	0.3250	0.1783	23.24
8	0.67605	-1.8567	0.2000	22.15
9	0.79776	-2.3359	0.2000	1.45
10	0.57840	-1.8152	0.2000	14.77
11	1.18070	1.8409	0.1322	56.93
12	.	.	.	.
13	0.41940	-0.9224	0.1667	10.23
14	0.65576	-0.2545	0.1094	4.41
15	0.39245	0.0560	0.2000	36.04
16	0.89903	-0.7162	0.2616	1.18
17	0.67595	-1.3252	0.2101	14.64
18	1.24795	-0.6193	0.2198	6.23
20	1.01965	-1.3052	0.1397	0.89
21	0.78986	-1.1726	0.1529	3.10
22	1.41804	-1.3440	0.2664	5.11
23	0.75764	-0.0590	0.2256	5.38
24	0.99567	-1.1381	0.2379	12.07
26	1.00263	-1.0304	0.2474	2.97
27	0.29350	-0.0317	0.2000	27.47
28	0.39699	2.4650	0.3306	7.01
30	0.69496	-0.4906	0.1667	31.90
31	.	.	.	.
32	0.48952	0.9486	0.1477	14.30
33	0.81643	-0.4962	0.2993	4.15
34	0.43305	0.0444	0.1009	10.74
35	0.54137	-0.7237	0.0679	8.15
36	0.65930	-0.3890	0.2352	6.31
37	0.60275	0.7921	0.1667	90.09
38	1.04832	0.9961	0.3078	9.17
39	0.56766	-0.7327	0.0879	4.71
40	0.77577	0.7600	0.2577	12.58
41	0.67194	-1.8791	0.2000	4.22
44	0.71851	-1.2372	0.1738	4.63
45	1.35101	-1.3465	0.2358	4.60
46	0.96242	-0.4887	0.1482	24.91
89	0.42115	-0.8794	0.2000	101.04
91	0.86825	-2.0360	0.2000	6.42
92	0.56607	-0.7776	0.2000	28.52
93	0.32102	0.9536	0.2000	63.74
95	1.42663	-2.7765	0.2000	63.55
96	1.59131	-2.5964	0.2000	85.56
97	1.39271	-2.4735	0.2000	30.46
99	0.96387	-1.6992	0.1337	3.55
101	0.61329	-0.6124	0.2000	122.27
102	0.69628	-1.6579	0.1667	12.28
104	0.60333	-0.4275	0.2000	25.77

continued

**Table 133. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 9 Reading (Concluded)**

Item	a	b	c	Fit-Z
105	1.37640	-1.7989	0.0895	4.57
106	0.83902	-1.2746	0.0327	114.12
107	0.82538	-1.3074	0.0741	144.63
108	0.56125	-1.4778	0.1284	9.09
109	0.61389	-0.8698	0.1667	42.55
110	0.48923	-0.1671	0.0695	2.02
111	0.58720	-0.5276	0.1080	1.63
113	0.74488	-1.4908	0.2000	2.28
114	1.05275	-0.9490	0.2297	0.27

**N=59263 M1=45.5354 M2=671.3661 Critical Z=158.03**

**Table 134. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 9 Reading**

Item	f	g1	g2	g3	g4	Fit-Z
4	0.60956	-2.1378	0.3810	0.8022	.	78.33
7	0.75970	-1.8399	-2.1542	.	.	14.36
19	0.57845	-0.0580	-0.1751	0.0547	.	55.95
29	0.81458	-0.6212	1.4041	0.1977	.	83.15
42	0.75394	0.0895	-1.0659	0.0990	.	6.27
43	0.86342	-1.9580	-1.1297	1.0797	.	26.58
90	0.84682	-0.0862	-0.3184	0.7005	.	68.24
94	0.86511	-1.3443	-0.8715	0.8477	.	52.89
98	0.85178	0.2374	-1.4030	-0.1537	.	34.28
100	0.82867	-1.0202	0.1618	1.2765	.	63.14
103	0.55635	-0.5647	0.8552	.	.	19.41
112	0.76929	-0.7213	-0.1923	1.8176	.	64.52
115	1.20209	-1.1744	0.2763	1.9264	.	75.28
116	1.08137	-0.9927	0.6987	.	.	5.79

**N=59263 M1=45.5354 M2=671.3661 Critical Z=158.03**

**Table 135. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 9 Writing**

<b>Item</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>Fit-Z</b>
47	1.31907	-1.5735	0.3315	6.67
48	0.51884	-1.1471	0.2000	9.39
49	0.97951	0.2314	0.2390	5.04
50	0.38893	-0.5708	0.1379	2.22
51	1.04218	-1.0817	0.1435	3.50
52	0.86711	0.2013	0.1821	9.29
53	0.45081	-1.0337	0.1371	2.75
54	0.81839	-0.9204	0.2029	0.34
55	0.23525	-1.4843	0.2000	54.97
56	1.29437	-0.1401	0.2226	10.45
57	0.47569	1.0363	0.1261	1.65
58	0.58473	-0.1574	0.1344	0.20
59	0.80038	-1.0555	0.2000	4.80
60	1.13618	-1.2609	0.1429	11.44
61	0.68345	-0.7146	0.0927	5.80
62	0.54224	-0.7503	0.1011	16.31
63	0.83510	0.5345	0.2635	12.59
64	0.73249	1.1995	0.2089	30.89
65	0.62862	0.2549	0.1510	4.93
66	0.73714	-1.1439	0.1178	4.00
67	0.28972	1.3640	0.2000	45.19
69	1.34512	-0.8735	0.3599	9.82
70	0.94273	0.7351	0.1705	25.62
71	0.93691	-0.4426	0.1764	23.56
72	0.67364	-1.2816	0.2000	5.42
73	1.02294	-1.2890	0.1050	43.57
74	0.96500	-0.9731	0.1479	39.58
75	1.05581	0.6757	0.1689	34.65
76	1.22335	-0.8891	0.2565	11.16
77	1.11941	-1.4143	0.1862	32.13
78	0.42271	0.3762	0.2000	65.09
79	0.40945	-0.2004	0.1044	1.01
80	0.98955	-0.4886	0.3339	10.21
81	0.33978	-1.5286	0.2000	10.36
82	1.13817	0.8900	0.1046	30.60
83	0.76962	-0.8491	0.2000	49.62
84	1.34776	-0.8061	0.2780	6.67
85	0.97384	-0.6300	0.1980	10.40
86	0.95421	-0.2897	0.1918	5.93
87	1.46809	-0.2809	0.2000	32.94

**N=59156 M1=71.9359 M2=563.2277 Critical Z=157.75**

**Table 136. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 9 Writing**

Item	F	g1	g2	g3	g4	Fit-Z
1	1.13643	-4.8765	.	.	.	3.21
2A	1.24144	-1.9114	.	.	.	1.59
2B	1.35193	-0.7342	.	.	.	3.73
2C	0.38684	-0.0925	.	.	.	42.63
2D	0.86681	1.3707	.	.	.	13.06
2E	1.34036	-0.9141	.	.	.	6.69
2F	1.03768	-0.2007	.	.	.	16.49
3A	1.38269	-3.7017	-3.5744	-0.8521	1.0076	90.97
3B	1.49818	-5.3969	-3.6221	-0.6706	1.2718	42.73
3C	1.67539	-5.7176	-3.8059	.	.	21.22
25	0.95183	-1.9415	-3.2862	-0.1273	2.1693	122.64
68	1.04644	-2.5339	-3.3860	-0.2445	2.6025	108.96
88	0.76481	-1.2485	-2.6950	-0.2279	2.0802	128.42
<b>N=59156 M1=71.9359 M2=563.2277 Critical Z=157.75</b>						

**Table 137. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 9 Mathematics**

Item	a	b	c	Fit-Z
1	0.63575	-2.3692	0.2000	29.35
2	1.00413	0.8135	0.2785	16.28
4	0.56049	1.2873	0.2628	5.54
5	1.26366	1.4851	0.1065	9.11
6	1.27105	0.3957	0.3518	4.85
7	0.87267	-0.2546	0.3403	27.35
9	0.90088	-0.3003	0.1086	8.60
10	0.87823	0.8008	0.0983	3.99
12	0.90462	0.7026	0.1110	2.17
13	1.02348	0.4729	0.2483	3.75
15	1.14561	2.1727	0.3381	0.98
16	0.41807	0.8935	0.3636	8.20
17	1.02150	1.6250	0.2849	0.34
18	1.35307	1.1271	0.2631	19.42
19	1.50128	1.0051	0.1483	53.43
21	0.56390	0.6366	0.0964	5.81
22	1.15798	-0.0791	0.1645	21.72
24	0.94872	0.8684	0.1347	37.87
25	1.55582	1.4569	0.0884	39.23
27	1.46678	1.8859	0.0777	28.20
28	0.91952	0.1256	0.2966	12.55
29	1.67323	1.8690	0.2928	1.85
30	0.59265	-0.9171	0.0620	17.66
31	1.21318	0.9116	0.2922	3.07
33	0.43912	-0.1964	0.2000	36.62
34	1.01646	1.0887	0.2741	6.86
36	1.29656	0.7240	0.3152	19.76
37	0.86021	-1.3066	0.1715	11.83
38	0.57380	0.7781	0.4997	102.59
39	1.03068	0.7266	0.0984	13.01
41	0.76901	0.2565	0.2525	1.00
42	1.08478	1.2448	0.4777	16.06
44	0.80695	-0.1891	0.3648	20.37
45	1.76471	2.1782	0.0330	197.12
47	0.78134	0.0372	0.3295	3.21
48	0.84421	1.3693	0.4049	2.59
49	1.39030	1.5962	0.4117	6.88
51	0.45799	0.8436	0.0432	5.50
52	0.65693	-0.6520	0.1039	4.41
53	1.39686	1.3118	0.1786	11.92
55	0.49483	1.4661	0.1367	26.79
56	0.67981	-0.6371	0.2447	1.65
57	1.17205	2.1356	0.3384	12.66
58	0.68324	-1.5904	0.2000	29.84
59	0.24019	1.3149	0.2000	43.14

**N=58089 M1=58.4743 M2=580.1279 Critical Z=154.90**

**Table 138. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 9 Mathematics**

Item	F	g1	g2	g3	g4	Fit-Z
3	1.23888	0.0381	0.4378	.	.	113.97
8	1.05751	0.8670	1.4630	-0.6820	.	32.33
11	1.25091	0.1816	0.6184	.	.	12.28
14	1.44453	1.6756	2.3059	2.5287	.	13.11
20	1.14532	-1.3040	-0.3237	0.4207	1.4046	56.63
23	1.41947	-1.4259	1.4618	.	.	109.38
26	1.09953	0.2609	0.8049	3.2334	.	3.66
32	1.32962	0.7924	1.6328	.	.	52.96
35	0.75025	-0.3205	0.4698	0.2080	.	99.22
40	1.27273	2.1549	1.4835	1.7057	1.5812	22.66
43	1.33688	1.4567	3.3552	.	.	51.21
46	1.16855	0.4444	2.8271	0.2045	.	144.00
50	0.94275	-0.5391	1.3130	.	.	140.32
54	0.89225	-0.9200	1.9180	1.4249	.	65.16
60	0.96810	-0.9608	1.3426	1.5620	2.2890	69.33
<b>N=58089 M1=58.4743 M2=580.1279 Critical Z=154.90</b>						



**Table 139. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade10 Reading**

Item	a	b	c	Fit-Z
4	1.01433	0.2997	0.2513	10.69
6	0.53004	0.4271	0.2602	3.43
7	0.74817	-0.9392	0.3558	3.80
8	0.19208	1.9922	0.2000	6.10
9	0.34968	-1.2038	0.2000	26.54
10	0.90281	-1.7605	0.2255	6.47
12	0.71493	0.9089	0.2669	2.06
13	0.34046	-0.7637	0.2000	174.15
14	0.32051	-0.7063	0.1033	13.05
15	0.55205	0.7500	0.1957	3.14
16	0.67987	-1.7803	0.2000	18.43
17	0.48589	1.5668	0.2342	2.82
18	0.55909	0.6292	0.1833	7.21
19	0.72245	0.5293	0.2297	8.51
20	0.95937	0.1545	0.2299	5.13
21	0.38423	0.9230	0.1609	0.73
22	0.81266	-0.7463	0.3639	9.12
23	0.59138	-1.6010	0.1843	27.39
24	1.18644	0.5296	0.3239	8.43
25	0.94697	-0.0782	0.2679	3.24
26	0.51232	-1.4251	0.0772	1.11
27	0.69373	-1.2022	0.0661	5.58
30	0.23402	0.8366	0.2000	149.70
32	0.33595	0.7927	0.2000	30.91
33	0.76221	1.6957	0.1788	13.08
35	0.74555	-0.9384	0.1601	0.65
37	0.74798	-1.6447	0.0567	1.36
38	0.79813	0.2584	0.3856	21.72
39	0.59831	-1.3785	0.1843	6.36
40	1.02558	-0.6308	0.2564	6.21
41	0.40790	-0.2204	0.0940	6.34
42	0.92409	-2.4942	0.2000	14.64
43	0.73861	-0.2446	0.1381	8.36
45	1.21569	-0.6891	0.2846	8.65
46	1.45735	0.1668	0.2728	23.30
48	0.88100	-0.5982	0.0695	10.02
49	1.21965	0.9979	0.2620	20.28
50	0.98919	-0.4360	0.3664	3.57
52	0.79523	-0.6201	0.2082	5.90
53	0.69076	-1.2586	0.2269	1.55
97	0.77526	-1.8385	0.0953	4.26
98	0.55587	-0.8565	0.2000	77.34
99	0.45217	-2.7394	0.2000	438.89
100	0.83216	-1.9684	0.1395	9.29
102	0.57354	-0.7714	0.0590	2.92
103	1.43781	-1.7617	0.1385	8.57

continued

**Table 139. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 10 Reading (Concluded)**

Item	a	b	c	Fit-Z
104	0.62959	-1.4126	0.2000	6.14
105	0.62186	-0.7942	0.2066	5.36
106	0.84174	-1.0410	0.2000	0.98
107	1.06410	1.0298	0.2777	4.95
109	0.61739	-1.3578	0.0923	-0.01
110	0.56856	-1.6569	0.0887	7.41
111	1.22705	-0.8400	0.2474	2.67
113	0.67997	-0.9852	0.1843	58.10
114	0.67180	-0.4681	0.1611	1.51
115	0.79177	-1.4867	0.1448	9.46

**N=55434 M1=49.1452 M2=688.4885 Critical Z=147.82**

**Table 140. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 10 Reading**

Item	F	g1	g2	g3	g4	Fit-Z
5	0.62797	-1.2139	-1.0086	-0.3634	0.0797	27.34
11	0.72000	-1.7478	-0.2643	.	.	19.86
28	0.63861	-1.2753	-0.1529	0.5752	.	138.35
29	0.94649	-0.9756	0.2165	1.5490	.	31.72
31	0.84148	-0.1673	0.7385	1.5312	.	4.31
34	0.90102	-0.5746	0.7874	1.7527	.	35.24
36	1.13822	-1.6030	1.9825	.	.	13.64
44	1.07728	-0.9156	-0.2864	-0.1905	.	35.60
47	0.70737	-0.1471	-0.8744	-0.0596	.	66.21
51	0.86109	0.0171	1.2005	0.2129	.	46.35
96	0.84151	-1.2963	-0.0036	1.1703	.	28.51
101	0.50139	-0.5350	1.0649	.	.	42.26
108	0.94673	-0.7634	-0.1071	0.6203	.	25.64
112	0.86500	-1.0494	-0.2661	1.5430	.	11.25

**N=55434 M1=49.1452 M2=688.4885 Critical Z=147.82**

**Table 141. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 10 Writing**

<b>Item</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>Fit-Z</b>
54	1.67982	-1.7776	0.2853	4.90
55	0.55184	0.0199	0.1692	11.46
56	0.78730	-1.5617	0.2556	8.10
57	0.98838	-0.7344	0.2446	3.98
58	0.75533	0.0912	0.2038	8.58
59	1.50451	-1.2676	0.1978	13.11
60	1.17609	-1.2890	0.1182	11.79
61	1.69886	-1.4350	0.1451	13.08
62	1.14006	-1.3582	0.1141	12.42
63	0.74810	-1.2921	0.2000	12.38
64	0.26446	1.1150	0.2000	57.91
65	1.28105	-0.7335	0.1118	37.50
66	1.28693	-0.2672	0.1798	26.08
67	0.33209	0.3502	0.2000	108.24
68	1.39840	-1.1476	0.2197	10.87
69	0.58371	-0.2645	0.2000	51.08
70	0.90350	-0.5296	0.2907	6.86
71	1.00741	-1.6509	0.1094	9.11
73	1.41005	-1.1587	0.0922	9.72
74	1.13780	-0.7025	0.1931	7.28
75	1.76471	-1.3539	0.2002	25.77
76	0.56782	0.1447	0.1270	28.26
77	0.62000	1.1051	0.3222	4.60
78	0.76829	0.6758	0.1685	19.21
79	1.09978	-1.3649	0.1226	34.32
80	1.01813	-1.5134	0.1652	27.42
81	1.35988	-1.0316	0.1712	13.39
82	0.77557	-0.5435	0.0931	2.69
83	0.61050	-0.4934	0.1122	18.13
84	0.71788	-0.4114	0.1352	21.44
85	1.76431	-1.4078	0.2372	21.76
86	1.04039	-1.0932	0.0953	8.04
87	0.63561	0.6868	0.1292	100.31
88	0.79570	-1.3519	0.2000	13.57
89	1.30647	-0.9548	0.2308	5.73
90	0.94612	0.5480	0.2602	7.95
91	0.77397	0.9351	0.2229	4.64
92	1.16799	-0.9540	0.1862	9.31
93	0.72201	-1.0446	0.2000	36.65
94	1.02720	-1.3935	0.0620	70.12

**N=55256 M1=79.1595 M2=574.3836 Critical Z=147.35**

**Table 142. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 10 Writing**

Item	F	g1	g2	g3	g4	Fit-Z
1	1.09751	-4.5167	.	.	.	2.58
2A	1.64112	-3.1454	.	.	.	5.02
2B	1.09893	-1.5204	.	.	.	33.50
2C	0.87235	0.0349	.	.	.	5.39
2D	0.94846	-1.8139	.	.	.	18.10
2E	1.06697	2.0189	.	.	.	37.63
2F	1.13701	-2.0454	.	.	.	39.68
3A	1.22948	-3.0544	-3.2603	-0.4431	1.2622	257.98
3B	1.38606	-4.3653	-3.6157	-0.4588	1.3827	95.85
3C	1.45539	-4.5898	-3.6536	.	.	30.07
72	0.81885	-1.5770	-2.8642	-0.0077	1.9371	81.69
95	1.00352	-1.4592	-2.9351	0.1803	2.4071	159.90
116	0.74725	-1.1456	-2.6162	-0.4009	2.0081	122.27
<b>N=55256 M1=79.1595 M2=574.3836 Critical Z=147.35</b>						

**Table 143. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 10 Mathematics**

Item	a	b	c	Fit-Z
1	1.13331	1.1333	0.4999	139.21
2	1.46687	1.4481	0.1322	8.91
3	1.66902	1.5318	0.1442	334.80
5	0.65023	1.2792	0.1804	13.83
6	0.48227	1.1452	0.2000	184.68
7	1.24077	1.3184	0.3096	19.34
8	1.76471	1.5390	0.2339	105.43
10	0.84716	0.2072	0.1348	0.31
11	.	.	.	.
12	.	.	.	.
13	0.82141	1.0579	0.0446	76.42
15	1.66098	1.5482	0.3019	48.63
16	0.81418	0.2892	0.2397	2.31
17	1.04760	-0.4492	0.3047	3.92
19	0.73102	-0.1792	0.2040	77.65
21	1.07645	1.2855	0.1440	2.20
22	0.58738	-0.6550	0.2081	5.39
23	1.18905	1.4486	0.1422	20.27
24	0.84702	1.3577	0.0565	23.63
26	0.98577	0.1273	0.3238	14.42
27	0.45469	-1.5517	0.2000	25.19
29	2.11282	1.8714	0.3892	146.34
30	1.00706	0.1008	0.3417	3.66
31	0.90752	1.8577	0.1932	46.09
33	0.30251	2.4501	0.1892	22.05
34	1.36367	1.0097	0.1407	11.33
35	1.25793	0.7714	0.2821	4.02
37	1.76471	1.3402	0.2520	63.49
38	0.71053	0.9426	0.0519	2.46
39	1.13545	0.7441	0.1670	5.72
41	1.32963	1.5173	0.1083	2.87
42	0.56920	-0.9293	0.0610	11.31
43	1.32320	1.4868	0.2834	10.17
44	0.68338	1.5952	0.1290	18.20
46	0.60214	-2.1498	0.2000	36.76
47	1.28647	0.6961	0.0593	12.79
49	0.97158	1.7368	0.3259	2.85
50	0.71186	1.6308	0.4050	60.27
51	0.99523	-0.1989	0.1907	5.12
53	1.51160	1.0658	0.3911	8.22
54	0.56799	0.1583	0.0273	14.19
55	1.65549	1.5558	0.2576	13.65
56	1.01255	1.9049	0.3534	3.06
58	0.57748	1.4534	0.1133	15.39
59	0.72556	0.1912	0.2966	27.52

**N=54773 M1=59.8532 M2=592.3002 Critical Z=146.06**

**Table 144. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 10 Mathematics**

Item	F	g1	g2	g3	g4	Fit-Z
4	0.81109	0.1489	-1.6484	.	.	195.80
9	0.79549	1.0249	-0.8947	2.1478	.	367.42
14	0.59747	3.6680	0.8465	.	.	7.01
18	1.00608	0.6461	2.1106	2.5906	.	36.56
20	0.88800	1.9534	1.3028	0.2751	1.3965	46.93
25	1.18874	-0.1550	0.1271	.	.	86.65
28	1.11948	-1.3577	0.7076	3.3914	.	101.23
32	1.25805	-0.5848	3.1459	.	.	100.04
36	1.02070	0.9006	1.4303	-0.9666	.	14.54
40	0.99007	0.2096	0.8005	0.8571	0.7301	95.95
45	0.64352	1.1367	0.0209	.	.	87.13
48	1.24590	0.1360	-0.6522	-0.2122	.	140.20
52	1.26847	2.3820	-0.5027	.	.	97.97
57	1.18045	0.3570	2.7672	-0.1215	.	167.11
60	1.25972	-2.2417	0.0844	1.7915	3.7344	88.97
<b>N=54773 M1=59.8532 M2=592.3002 Critical Z=146.06</b>						

**Table 145. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 10 Science**

Item	a	b	c	Fit-Z
1	0.35669	-1.5467	0.2000	74.04
2	1.08106	1.9603	0.2750	13.10
3	0.71625	1.8129	0.1312	1.39
4	0.50852	1.4175	0.1728	4.96
5	0.65846	0.8873	0.3462	12.49
7	0.93694	-0.1689	0.3421	3.79
8	1.17992	0.0832	0.2405	7.30
9	0.62173	1.3756	0.2296	10.46
10	0.37229	0.4785	0.2000	98.32
11	1.23181	1.3405	0.2383	9.75
12	0.71082	0.4252	0.4307	10.85
13	0.76897	0.9863	0.2689	4.06
14	0.59785	1.3061	0.1598	5.24
15	0.28334	3.3956	0.2000	26.53
16	0.45384	-0.2648	0.2000	111.34
17	0.39724	0.0305	0.0942	10.88
18	0.96827	-0.6424	0.1106	52.43
19	0.76921	1.4313	0.4304	17.58
20	0.85880	1.8372	0.1941	48.86
28	0.69682	-0.9395	0.2000	11.60
30	0.60575	-1.7661	0.1078	15.75
31	1.41636	1.8807	0.3531	15.05
32	1.33228	0.9578	0.1465	36.96
33	1.16316	-1.4561	0.2209	16.07
35	0.73540	-0.7062	0.3695	1.20
37	.	.	.	.
39	0.96394	0.3482	0.3231	9.15
40	0.93830	0.0570	0.2017	12.48
42	0.94876	-1.7283	0.1138	32.36
43	1.08030	0.8718	0.2165	9.35
45	0.53980	1.9080	0.1544	3.60
46	0.37642	0.5094	0.2000	20.96
47	0.60591	1.7649	0.2139	2.86
48	0.81868	-0.0588	0.2233	13.17
49	1.76471	1.2726	0.2619	88.41
51	0.92278	-0.0279	0.1162	4.47
52	0.82081	-1.1444	0.2323	2.78
54	0.55295	0.3122	0.1607	3.74
55	1.10614	-0.7455	0.3168	4.60
56	0.51278	-0.1949	0.2161	8.15
57	1.27083	0.8251	0.2132	18.72
58	1.14456	0.1184	0.3203	8.97
59	0.72214	0.7050	0.1696	8.57
60	0.55889	1.2184	0.1721	-0.23
62	0.64903	-0.7039	0.2000	18.90
63	0.77363	-0.8129	0.0873	4.96
64	0.72771	1.2236	0.1988	5.27

continued

**Table 145. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 10 Science (Concluded)**

Item	a	b	c	Fit-Z
66	0.91348	-0.5311	0.3358	3.83
67	0.69085	2.1403	0.1531	1.66
69	1.04686	0.5901	0.2500	12.34
70	0.55194	-1.8091	0.2115	7.78
71	0.52774	0.7562	0.1119	3.99
72	0.50949	-0.9790	0.1648	9.42
74	0.64588	0.0322	0.1011	6.33
75	0.42862	0.5007	0.2000	31.96
76	0.32744	0.6862	0.0976	6.54
78	0.88890	-0.3524	0.1104	13.61
79	0.67308	1.1027	0.2461	3.07
80	1.23305	0.9098	0.2089	7.84
82	1.10869	0.3167	0.4273	7.23

**N=54645 M1=55.8887 M2=499.4171 Critical Z=145.72**

**Table 146. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 10 Science**

Item	F	g1	g2	g3	g4	Fit-Z
6	0.87653	0.2935	1.4301	.	.	6.52
21	0.44050	0.3918	-1.2621	0.4470	0.2431	36.89
22	0.61416	0.4772	-0.0314	.	.	22.83
23	1.19250	-0.0402	.	.	.	4.63
24	0.46003	-0.2466	-0.7055	-0.2754	.	48.58
25	1.08191	0.9775	.	.	.	48.18
26	0.76999	-0.0518	.	.	.	107.57
27	1.22063	0.2296	.	.	.	46.01
29	0.46100	-0.5683	.	.	.	31.65
34	1.06820	2.7419	5.3130	.	.	43.67
36	0.95162	-1.0232	-0.0408	.	.	99.54
38	1.09522	0.5505	.	.	.	86.17
41	1.21545	1.3446	4.3546	.	.	49.19
44	0.73160	0.5890	-0.5914	.	.	17.85
50	0.84570	1.5705	0.5473	.	.	73.53
53	0.99151	1.8522	2.5791	.	.	7.74
61	1.07518	0.4760	1.9283	.	.	9.13
65	1.04648	-1.4873	-1.4390	.	.	88.37
68	1.07263	-0.0458	1.1113	.	.	23.43
73	1.06213	0.1916	.	.	.	1.79
77	0.39784	-0.4651	-0.0532	.	.	6.04
81	0.63420	1.5103	.	.	.	4.61
83	1.23190	-0.2707	.	.	.	22.79

**N=54645 M1=55.8887 M2=499.4171 Critical Z=145.72**



**Table 147. Correlations Between the Reference and New Form Item Parameters for the 2010 CSAP Administration**

<b>Content</b>	<b>Grade</b>	<b>Discrimination (a)</b>	<b>Difficulty (b)</b>	<b>Guessing (c)</b>	<b>P-Value (p)</b>
Reading	3	0.98	0.99	0.94	0.99
Reading	4	0.99	1.00	0.97	1.00
Reading	5	0.99	0.98	0.93	0.99
Reading	6	0.99	1.00	0.98	1.00
Reading	7	0.98	0.98	0.94	0.99
Reading	8	0.98	0.98	0.79	0.99
Reading	9	0.99	0.96	0.75	0.99
Reading	10	0.95	0.98	0.80	0.99
Writing	3	0.94	0.93	0.77	0.99
Writing	4	0.98	1.00	0.86	0.99
Writing	5	0.98	0.99	0.78	0.98
Writing	6	0.98	0.91	0.50	0.98
Writing	7	0.97	0.97	0.83	1.00
Writing	8	0.89	0.99	0.86	0.91
Writing	9	0.97	0.99	0.76	0.99
Writing	10	0.96	0.99	0.83	0.99
Mathematics	3	0.96	0.99	0.70	0.99
Mathematics	4	0.96	0.99	0.85	0.99
Mathematics	5	0.98	0.99	0.80	1.00
Mathematics	6	0.97	0.97	0.81	0.99
Mathematics	7	0.97	0.84	0.71	1.00
Mathematics	8	0.99	0.96	0.90	0.99
Mathematics	9	0.99	0.99	0.98	0.98
Mathematics	10	0.96	0.99	0.94	1.00
Science	5	0.93	0.99	0.85	0.99
Science	8	0.92	0.99	0.92	0.99
Science	10	0.96	0.99	0.82	0.99
Reading Spanish	3	0.81	0.98	0.54	0.99
Reading Spanish	4	0.15	0.65	-0.22	0.99
Writing Spanish	3	-0.72	-0.01	-0.11	1.00
Writing Spanish	4	-0.06	0.13	0.10	1.00

**Table 148. Scaling Constants Across Grades and Content Areas  
for Two Administrations**

Content	Grade	2009		2010	
		Multiplicative	Additive	Multiplicative	Additive
Reading	3	59.6	569.4	65.6	562.4
Reading	4	55.2	596.1	49.4	588.9
Reading	5	56.3	625.5	56.9	618.6
Reading	6	56.4	632.3	56.4	639.6
Reading	7	56.2	647.0	54.7	651.2
Reading	8	50.7	655.5	51.1	660.8
Reading	9	45.7	666.0	45.5	671.4
Reading	10	44.1	694.2	49.1	688.5
Writing	3	43.6	471.2	45.6	461.7
Writing	4	45.6	488.5	46.0	487.0
Writing	5	48.3	513.2	50.2	507.8
Writing	6	52.8	531.2	55.3	527.6
Writing	7	61.2	561.9	63.3	558.0
Writing	8	61.3	562.2	64.2	566.1
Writing	9	69.3	568.7	71.9	563.2
Writing	10	72.7	588.9	79.2	574.4
Mathematics	3	73.7	467.6	79.8	481.0
Mathematics	4	68.5	501.6	65.9	509.9
Mathematics	5	67.7	524.9	60.4	533.9
Mathematics	6	66.6	551.7	62.3	552.6
Mathematics	7	61.7	569.5	62.9	556.7
Mathematics	8	53.0	580.1	60.5	586.2
Mathematics	9	62.1	567.6	58.5	580.1
Mathematics	10	62.8	592.4	59.9	592.3
Science	5	57.1	507.2	54.7	508.3
Science	8	53.4	510.8	52.7	505.2
Science	10	54.6	508.5	55.9	499.4
Reading Spanish	3	39.3	528.5	39.3	528.5
Reading Spanish	4	—*	—*	1.0	0.0
Writing Spanish	3	—*	—*	64.2	501.5
Writing Spanish	4	—*	—*	1.0	0.0

\*Grade 4 Spanish Reading and Grades 3 and 4 Spanish Writing were pre-equated.

**Table 149. CSAP Item and Anchor Count by Content Standard  
for Final Calibration Sample: Reading**

Content Area	Grade	Content Standard	Item Set	No. of Items	Percentage
Reading	3	CS 1	Anchor Set	16	100.0
			Total Test	40	100.0
		Total	Anchor Set	16	100.0
			Total Test	40	100.0
Reading	4	CS 1	Anchor Set	8	38.1
			Total Test	29	41.4
		CS 4	Anchor Set	5	23.8
			Total Test	15	21.4
		CS 5	Anchor Set	5	23.8
			Total Test	13	18.6
		CS 6	Anchor Set	3	14.3
			Total Test	13	18.6
		Total	Anchor Set	21	100.0
			Total Test	70	100.0
Reading	5	CS 1	Anchor Set	8	34.8
			Total Test	25	35.7
		CS 4	Anchor Set	5	21.7
			Total Test	15	21.4
		CS 5	Anchor Set	5	21.7
			Total Test	17	24.3
		CS 6	Anchor Set	5	21.7
			Total Test	13	18.6
		Total	Anchor Set	23	100.0
			Total Test	70	100.0
Reading	6	CS 1	Anchor Set	8	38.1
			Total Test	27	38.6
		CS 4	Anchor Set	5	23.8
			Total Test	12	17.1
		CS 5	Anchor Set	3	14.3
			Total Test	19	27.1
		CS 6	Anchor Set	5	23.8
			Total Test	12	17.1
		Total	Anchor Set	21	100.0
			Total Test	70	100.0
Reading	7	CS 1	Anchor Set	6	27.3
			Total Test	21	30.0
		CS 4	Anchor Set	4	18.2
			Total Test	17	24.3
		CS 5	Anchor Set	7	31.8
			Total Test	17	24.3
		CS 6	Anchor Set	5	22.7
			Total Test	15	21.4
		Total	Anchor Set	22	100.0
			Total Test	70	100.0

**Table 149. CSAP Item and Anchor Count by Content Standard for Final Calibration Sample: Reading (Concluded)**

Content Area	Grade	Content Standard	Item Set	No. of Items	Percentage
Reading	8	CS 1	Anchor Set	6	26.1
			Total Test	23	33.3
		CS 4	Anchor Set	7	30.4
			Total Test	17	24.6
		CS 5	Anchor Set	6	26.1
			Total Test	15	21.7
		CS 6	Anchor Set	4	17.4
			Total Test	14*	20.3
		Total	Anchor Set	23	100.0
			Total Test	69	100.0
Reading	9	CS 1	Anchor Set	5	22.7
			Total Test	17*	25.0
		CS 4	Anchor Set	5	22.7
			Total Test	16	23.5
		CS 5	Anchor Set	7	31.8
			Total Test	19	27.9
		CS 6	Anchor Set	5	22.7
			Total Test	12*	17.6
		Total	Anchor Set	22	100.0
			Total Test	68	100.0
Reading	10	CS 1	Anchor Set	6	28.6
			Total Test	22	31.4
		CS 4	Anchor Set	5	23.8
			Total Test	16	22.9
		CS 5	Anchor Set	5	23.8
			Total Test	19	27.1
		CS 6	Anchor Set	5	23.8
			Total Test	13	18.6
		Total	Anchor Set	21	100.0
			Total Test	70	100.0

\* Content area in which item(s) were removed from calibration or anchor set. Count shown in this table does not include removed items.

**Table 150. CSAP Item and Anchor Count by Content Standard for Final Calibration Sample: Mathematics**

Content Area	Grade	Content Standard	Item Set	No. of Items	Percentage
Mathematics	3	CS 1	Anchor Set	3	15.8
			Total Test	8	20.0
		CS 2/3	Anchor Set	7	36.8
			Total Test	11	27.5
		CS 4/5	Anchor Set	6	31.6
			Total Test	14	35.0
		CS 6	Anchor Set	3	15.8
			Total Test	7	17.5
		Total	Anchor Set	19	100.0
			Total Test	40	100.0
Mathematics	4	CS 1	Anchor Set	4	18.2
			Total Test	14	20.3
		CS 2	Anchor Set	4	18.2
			Total Test	9	13.0
		CS 3	Anchor Set	3	13.6
			Total Test	11	15.9
		CS 4/5	Anchor Set	6	27.3
			Total Test	21	30.4
		CS 6	Anchor Set	5	22.7
			Total Test	14	20.3
		Total	Anchor Set	22	100.0
			Total Test	69	100.0
Mathematics	5	CS 1	Anchor Set	4	20.0
			Total Test	16	23.2
		CS 2	Anchor Set	4	20.0
			Total Test	11	15.9
		CS 3	Anchor Set	4	20.0
			Total Test	11	15.9
		CS 4/5	Anchor Set	4	20.0
			Total Test	15	21.7
		CS 6	Anchor Set	4	20.0
			Total Test	16	23.2
		Total	Anchor Set	20	100.0
			Total Test	69	100.0
Mathematics	6	CS 1	Anchor Set	4	20.0
			Total Test	13	21.7
		CS 2	Anchor Set	4	20.0
			Total Test	10	16.7
		CS 3	Anchor Set	4	20.0
			Total Test	10	16.7
		CS 4/5	Anchor Set	5	25.0
			Total Test	16	26.7
		CS 6	Anchor Set	3	15.0
			Total Test	11	18.3
		Total	Anchor Set	20	100.0
			Total Test	60	100.0

**Table 150. CSAP Item and Anchor Count by Content Standard for Final Calibration Sample: Mathematics (Continued)**

Content Area	Grade	Content Standard	Item Set	No. of Items	Percentage
Mathematics	7	CS 1/6	Anchor Set	6	30.0
			Total Test	19	31.7
		CS 2	Anchor Set	4	20.0
			Total Test	12	20.0
		CS 3	Anchor Set	5	25.0
			Total Test	12	20.0
		CS 4/5	Anchor Set	5	25.0
			Total Test	17	28.3
		Total	Anchor Set	20	100.0
			Total Test	60	100.0
Mathematics	8	CS 1/6	Anchor Set	5	25.0
			Total Test	15	25.0
		CS 2	Anchor Set	5	25.0
			Total Test	15	25.0
		CS 3	Anchor Set	4	20.0
			Total Test	12	20.0
		CS 4/5	Anchor Set	6	30.0
			Total Test	18	30.0
		Total	Anchor Set	20	100.0
			Total Test	60	100.0
Mathematics	9	CS 1/6	Anchor Set	4	20.0
			Total Test	13	21.7
		CS 2	Anchor Set	4	20.0
			Total Test	17	28.3
		CS 3	Anchor Set	6	30.0
			Total Test	15	25.0
		CS 4/5	Anchor Set	6	30.0
			Total Test	15	25.0
		Total	Anchor Set	20	100.0
			Total Test	60	100.0
Mathematics	10	CS 1/6	Anchor Set	5	23.8
			Total Test	13	22.4
		CS 2	Anchor Set	5	23.8
			Total Test	17	29.3
		CS 3	Anchor Set	5	23.8
			Total Test	14*	24.1
		CS 4/5	Anchor Set	6	28.6
			Total Test	14*	24.1
		Total	Anchor Set	21	100.0
			Total Test	58	100.0

\* Content area in which item(s) were removed from calibration or anchor set. Count shown in this table does not include removed items.

**Table 151. CSAP Item and Anchor Count by Content Standard for Final Calibration Sample: Writing**

Content Area	Grade	Content Standard	Item Set	No. of Items	Percentage
Writing	3	CS 2	Anchor Set	8	42.1
			Total Test	21	39.6
		CS 3	Anchor Set	11	57.9
			Total Test	32	60.4
		Total	Anchor Set	19	100.0
			Total Test	53	100.0
Writing	4	CS 2	Anchor Set	9	45.0
			Total Test	21	39.6
		CS 3	Anchor Set	11	55.0
			Total Test	32	60.4
		Total	Anchor Set	20	100.0
			Total Test	53	100.0
Writing	5	CS 2	Anchor Set	8*	42.1
			Total Test	20	38.5
		CS 3	Anchor Set	11	57.9
			Total Test	32	61.5
		Total	Anchor Set	19	100.0
			Total Test	52	100.0
Writing	6	CS 2	Anchor Set	10*	47.6
			Total Test	20	38.5
		CS 3	Anchor Set	11	52.4
			Total Test	32	61.5
		Total	Anchor Set	21	100.0
			Total Test	52	100.0
Writing	7	CS 2	Anchor Set	11	50.0
			Total Test	21	39.6
		CS 3	Anchor Set	12	54.5
			Total Test	32	60.4
		Total	Anchor Set	22	100.0
			Total Test	53	100.0
Writing	8	CS 2	Anchor Set	10	47.6
			Total Test	21	40.4
		CS 3	Anchor Set	11*	52.4
			Total Test	31	59.6
		Total	Anchor Set	21	100.0
			Total Test	52	100.0
Writing	9	CS 2	Anchor Set	10	45.5
			Total Test	21	39.6
		CS 3	Anchor Set	12	54.5
			Total Test	32	60.4
		Total	Anchor Set	22	100.0
			Total Test	53	100.0
Writing	10	CS 2	Anchor Set	10	45.5
			Total Test	21	39.6
		CS 3	Anchor Set	12	54.5
			Total Test	32	60.4
		Total	Anchor Set	22	100.0
			Total Test	53	100.0

\*

Content area in which item(s) were removed from calibration or anchor set. Count shown in this table does not include removed items.

**Table 152. CSAP Item and Anchor Count by Content Standard for Final Calibration Sample: Science**

Content Area	Grade	Content Standard	Item Set	No. of Items	Percentage
Science	5	CS 1/5	Anchor Set	8	40.0
			Total Test	30	40.0
		CS 2	Anchor Set	4	20.0
			Total Test	15	20.0
		CS 3	Anchor Set	4	20.0
			Total Test	15	20.0
		CS 4	Anchor Set	4	20.0
			Total Test	15	20.0
		Total	Anchor Set	20	100.0
			Total Test	75	100.0
Science	8	CS 1/5	Anchor Set	8	40.0
			Total Test	32	38.6
		CS 2	Anchor Set	4	20.0
			Total Test	18	21.7
		CS 3	Anchor Set	4	20.0
			Total Test	17	20.5
		CS 4	Anchor Set	4	20.0
			Total Test	16	19.3
		Total	Anchor Set	20	100.0
			Total Test	83	100.0
Science	10	CS 1/5	Anchor Set	8	42.1
			Total Test	33	40.2
		CS 2	Anchor Set	4	21.1
			Total Test	15*	18.3
		CS 3	Anchor Set	3	15.8
			Total Test	17	20.7
		CS 4	Anchor Set	4	21.1
			Total Test	17	20.7
		Total	Anchor Set	19	100.0
			Total Test	82	100.0

\* Content area in which item(s) were removed from calibration or anchor set. Count shown in this table does not include removed items.



**Table 153. CSAP Item and Anchor Count by Content Standard  
for Final Calibration Sample: Reading and Writing Spanish**

Content Area	Grade	Content Standard	Item Set	No. of Items	Percentage
Reading Spanish	3	CS 1	Anchor Set	18	100.0
			Total Test	40	100.0
		Total	Anchor Set	18	100.0
			Total Test	40	100.0
Reading Spanish	4	CS 1	Anchor Set	7	38.9
			Total Test	31	44.3
		CS 4	Anchor Set	4	22.2
			Total Test	14	20.0
		CS 5	Anchor Set	4	22.2
			Total Test	13	18.6
		CS 6	Anchor Set	3	16.7
			Total Test	12	17.1
		Total	Anchor Set	18	100.0
			Total Test	70	100.0

Content Area	Grade	Content Standard	Item Set	No. of Items	Percentage
Writing Spanish	3	CS 2	Anchor Set	5	27.8
			Total Test	21	39.6
		CS 3	Anchor Set	13	72.2
			Total Test	32	60.4
		Total	Anchor Set	18	100.0
			Total Test	53	100.0
Writing Spanish	4	CS 2	Anchor Set	4	22.2
			Total Test	19	35.8
		CS 3	Anchor Set	14	77.8
			Total Test	34	64.2
		Total	Anchor Set	18	100.0
			Total Test	53	100.0

**Table 154. Scale Score Descriptive Statistics by Gender**

		Gender											
		Female				Male				Total			
		N	Mean	SD	Median	N	Mean	SD	Median	N	Mean	SD	Median
Content	Grade												
Reading	3	30013	561	77.9	569	30869	544	90.0	558	60884	553	84.7	563
	4	29938	592	55.7	598	31149	579	66.3	588	61090	585	61.6	593
	5	29296	620	63.5	625	30494	605	70.8	614	59809	612	67.8	620
	6	28954	638	63.2	643	29859	620	70.3	629	58816	629	67.5	636
	7	28278	651	60.0	656	29486	631	66.8	640	57766	641	64.3	648
	8	27991	661	56.0	667	29133	643	62.2	652	57130	652	60.0	659
	9	28712	670	50.2	675	30341	653	53.6	658	59056	661	52.7	666
	10	27114	691	53.7	695	28120	671	61.3	680	55237	681	58.5	687
Spanish Reading	3	574	527	49.2	530	636	512	54.8	519	1210	519	52.7	524
	4	56	530	42.9	538	57	534	39.4	538	113	532	41.1	538
Writing	3	29946	474	49.5	472	30824	457	51.1	458	60770	465	51.0	465
	4	29936	494	52.0	494	31159	477	50.7	478	61099	485	52.0	485
	5	29267	517	54.1	517	30459	498	55.0	499	59745	507	55.4	508
	6	28974	534	60.1	533	29879	513	61.2	514	58856	524	61.6	523
	7	28281	566	68.5	566	29490	539	69.4	540	57773	552	70.4	553
	8	27996	580	69.7	580	29101	550	69.7	551	57103	565	71.4	565
	9	28734	579	77.1	578	30361	545	77.7	547	59098	561	79.3	562
	10	27098	593	86.3	591	28124	558	86.2	560	55225	575	88.0	575
Spanish Writing	3	579	523	71.1	527	632	493	74.1	496	1211	508	74.2	509
	4	56	517	41.6	523	57	512	34.0	511	113	515	37.9	517
Mathematics	3	30553	464	89.6	465	31488	471	95.3	474	62045	467	92.6	470
	4	30014	491	76.6	494	31244	494	81.2	499	61259	493	79.0	497
	5	29327	520	69.2	522	30534	520	75.1	525	59863	520	72.3	523
	6	28999	539	71.9	542	29903	535	77.9	541	58904	537	75.1	541
	7	28297	553	71.1	557	29538	551	78.7	557	57836	552	75.1	557
	8	28014	574	68.0	578	29173	576	75.4	581	57191	575	71.9	579
	9	28741	578	68.2	584	30401	578	75.2	585	59144	578	71.9	585
	10	27162	586	68.9	592	28252	589	77.0	596	55419	588	73.2	594
Science	5	29432	497	61.3	500	30609	501	65.0	505	60043	499	63.2	503
	8	28166	498	58.0	503	29307	499	63.6	507	57478	498	60.9	505
	10	27242	494	60.2	502	28312	496	67.6	506	55559	495	64.1	504

**Table 155. Scale Score Descriptive Statistics by Content Standard**

		Content Standard												Content Standard								
		1			2			3			4			5			6			Total		
		Mean	SD	Median	Mean	SD	Median	Mean	SD	Median	Mean	SD	Median	Mean	SD	Median	Mean	SD	Median	Mean	SD	Median
Content	Grade																					
Reading	3	553	84.70	563	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	553	84.70	563
	4	586	67.80	593	.	.	.	.	.	.	585	94.00	593	583	100.50	593	580	89.80	594	585	61.60	593
	5	614	83.60	619	.	.	.	.	.	.	614	87.50	620	611	91.30	621	610	89.40	620	612	67.80	620
	6	630	77.50	636	.	.	.	.	.	.	629	82.00	635	636	102.20	636	625	92.80	636	629	67.50	636
	7	643	72.60	647	.	.	.	.	.	.	644	76.60	648	644	88.00	648	639	82.00	649	641	64.30	648
	8	654	67.60	658	.	.	.	.	.	.	650	80.00	660	654	86.80	659	651	74.30	657	652	60.00	659
	9	662	60.30	666	.	.	.	.	.	.	661	75.20	666	668	74.80	667	657	75.70	665	661	52.70	666
Spanish Reading	10	681	66.60	688	.	.	.	.	.	.	679	73.90	687	686	79.60	687	680	73.20	686	681	58.50	687
	3	519	52.70	524	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	519	52.70	524
Writing	4	532	44.10	538	.	.	.	.	.	.	529	56.00	538	533	69.20	541	528	57.90	526	532	41.10	538
	3	.	.	.	467	56.50	467	.	70.30	465	.	.	.	.	.	.	.	.	.	465	51.00	465
	4	.	.	.	486	57.00	485	.	65.10	486	.	.	.	.	.	.	.	.	.	485	52.00	485
	5	.	.	.	508	60.50	508	.	66.20	508	.	.	.	.	.	.	.	.	.	507	55.40	508
	6	.	.	.	525	66.90	523	.	77.00	524	.	.	.	.	.	.	.	.	.	524	61.60	523
	7	.	.	.	554	76.60	553	.	83.60	553	.	.	.	.	.	.	.	.	.	552	70.40	553
	8	.	.	.	566	77.20	565	.	87.20	566	.	.	.	.	.	.	.	.	.	565	71.40	565
	9	.	.	.	563	86.50	561	.	90.70	563	.	.	.	.	.	.	.	.	.	561	79.30	562
Spanish Writing	10	.	.	.	577	96.60	574	.	103.40	576	.	.	.	.	.	.	.	.	.	575	88.00	575
	3	.	.	.	518	82.30	521	.	81.00	498	.	.	.	.	.	.	.	.	.	508	74.20	509
Math - ematics	4	.	.	.	508	43.50	514	.	41.70	519	.	.	.	.	.	.	.	.	.	515	37.90	517
	3	468	113.60	471	477	120.50	469	.	.	.	472	104.90	470	.	.	.	469	113.50	476	467	92.60	470
	4	493	92.90	498	511	123.70	498	.	106.40	497	506	104.80	497	.	.	.	500	105.30	498	493	79.00	497
	5	529	102.50	523	526	95.30	522	.	97.60	524	522	87.80	524	.	.	.	526	99.00	523	520	72.30	523
	6	538	100.30	542	541	96.80	541	.	95.20	542	536	88.00	542	.	.	.	555	121.50	542	537	75.10	541
	7	552	83.70	557	550	97.40	557	.	92.70	559	543	99.00	555	.	.	.	.	.	.	552	75.10	557
	8	564	100.80	580	577	85.00	579	.	90.80	580	570	90.00	579	.	.	.	.	.	.	575	71.90	579
	9	563	107.00	585	578	78.50	584	.	84.60	586	556	108.40	584	.	.	.	.	.	.	578	71.90	585
	10	568	110.90	597	584	87.40	594	.	81.00	595	575	99.80	594	.	.	.	.	.	.	588	73.20	594
Science	5	499	68.70	503	501	84.50	502	.	84.40	505	501	78.80	503	.	.	.	.	.	.	499	63.20	503
	8	499	66.50	505	491	85.80	505	.	74.70	504	494	76.80	505	.	.	.	.	.	.	498	60.90	505
	10	495	67.70	504	484	88.70	503	.	79.40	503	492	79.40	504	.	.	.	.	.	.	495	64.10	504

**Table 156. Scale Score Descriptive Statistics by Subcontent Area**

		Content Standard												Content Standard								
		1			2			3			4			5			6			Total		
		Mean	SD	Median	Mean	SD	Median	Mean	SD	Median	Mean	SD	Median	Mean	SD	Median	Mean	SD	Median	Mean	SD	Median
Content	Grade																					
Reading	3	553	84.70	563	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	553	84.70	563
	4	586	67.80	593	.	.	.	.	.	.	585	94.00	593	583	100.50	593	580	89.80	594	585	61.60	593
	5	614	83.60	619	.	.	.	.	.	.	614	87.50	620	611	91.30	621	610	89.40	620	612	67.80	620
	6	630	77.50	636	.	.	.	.	.	.	629	82.00	635	636	102.20	636	625	92.80	636	629	67.50	636
	7	643	72.60	647	.	.	.	.	.	.	644	76.60	648	644	88.00	648	639	82.00	649	641	64.30	648
	8	654	67.60	658	.	.	.	.	.	.	650	80.00	660	654	86.80	659	651	74.30	657	652	60.00	659
	9	662	60.30	666	.	.	.	.	.	.	661	75.20	666	668	74.80	667	657	75.70	665	661	52.70	666
	10	681	66.60	688	.	.	.	.	.	.	679	73.90	687	686	79.60	687	680	73.20	686	681	58.50	687
Spanish Reading	3	519	52.70	524	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	519	52.70	524
	4	532	44.10	538	.	.	.	.	.	.	529	56.00	538	533	69.20	541	528	57.90	526	532	41.10	538
Writing	3	.	.	.	467	56.50	467	.	70.30	465	.	.	.	.	.	.	.	.	.	465	51.00	465
	4	.	.	.	486	57.00	485	.	65.10	486	.	.	.	.	.	.	.	.	.	485	52.00	485
	5	.	.	.	508	60.50	508	.	66.20	508	.	.	.	.	.	.	.	.	.	507	55.40	508
	6	.	.	.	525	66.90	523	.	77.00	524	.	.	.	.	.	.	.	.	.	524	61.60	523
	7	.	.	.	554	76.60	553	.	83.60	553	.	.	.	.	.	.	.	.	.	552	70.40	553
	8	.	.	.	566	77.20	565	.	87.20	566	.	.	.	.	.	.	.	.	.	565	71.40	565
	9	.	.	.	563	86.50	561	.	90.70	563	.	.	.	.	.	.	.	.	.	561	79.30	562
	10	.	.	.	577	96.60	574	.	103.40	576	.	.	.	.	.	.	.	.	.	575	88.00	575
Spanish Writing	3	.	.	.	518	82.30	521	.	81.00	498	.	.	.	.	.	.	.	.	.	508	74.20	509
	4	.	.	.	508	43.50	514	.	41.70	519	.	.	.	.	.	.	.	.	.	515	37.90	517
Math - ematics	3	468	113.60	471	477	120.50	469	.	.	.	472	104.90	470	.	.	.	469	113.50	476	467	92.60	470
	4	493	92.90	498	511	123.70	498	.	106.40	497	506	104.80	497	.	.	.	500	105.30	498	493	79.00	497
	5	529	102.50	523	526	95.30	522	.	97.60	524	522	87.80	524	.	.	.	526	99.00	523	520	72.30	523
	6	538	100.30	542	541	96.80	541	.	95.20	542	536	88.00	542	.	.	.	555	121.50	542	537	75.10	541
	7	552	83.70	557	550	97.40	557	.	92.70	559	543	99.00	555	.	.	.	.	.	.	552	75.10	557
	8	564	100.80	580	577	85.00	579	.	90.80	580	570	90.00	579	.	.	.	.	.	.	575	71.90	579
	9	563	107.00	585	578	78.50	584	.	84.60	586	556	108.40	584	.	.	.	.	.	.	578	71.90	585
	10	568	110.90	597	584	87.40	594	.	81.00	595	575	99.80	594	.	.	.	.	.	.	588	73.20	594
Science	5	499	68.70	503	501	84.50	502	.	84.40	505	501	78.80	503	.	.	.	.	.	.	499	63.20	503
	8	499	66.50	505	491	85.80	505	.	74.70	504	494	76.80	505	.	.	.	.	.	.	498	60.90	505
	10	495	67.70	504	484	88.70	503	.	79.40	503	492	79.40	504	.	.	.	.	.	.	495	64.10	504

Table 157. Raw Score Descriptive Statistics by Content Standard

		Content Standard								Content Standard								Content Standard								Content Standard			
		1				2				3				4				5				6				Total			
		Mean	SD	Median	Mean % of Max	Mean	SD	Median	Mean % of Max	Mean	SD	Median	Mean % of Max	Mean	SD	Median	Mean % of Max	Mean	SD	Median	Mean % of Max	Mean	SD	Median	Mean % of Max	Mean	SD	Median	Mean % of Max
Content	Grade																												
Reading	3	31	10.7	33	59.9	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	31	10.7	33	59.9
	4	25	6.7	26	67.0	.	.	.	.	.	.	.	.	12	3.4	12	64.6	11	4.1	11	59.3	10	3.4	10	54.8	57	16.2	60	62.6
	5	20	6.4	22	65.5	.	.	.	.	.	.	.	.	12	3.8	12	59.2	12	3.7	12	58.3	10	3.5	10	50.1	54	15.7	57	59.2
	6	20	5.7	21	65.0	.	.	.	.	.	.	.	.	10	3.8	11	52.2	14	4.2	14	67.9	11	4.1	11	53.3	55	16.0	57	60.3
	7	19	5.4	20	61.7	.	.	.	.	.	.	.	.	13	3.6	13	63.6	13	3.7	14	66.2	12	3.6	12	58.1	57	14.8	59	62.3
	8	20	5.3	21	64.0	.	.	.	.	.	.	.	.	12	3.7	13	60.5	13	4.3	13	63.5	10	3.4	10	50.5	54	15.0	56	60.2
	9	20	5.6	21	64.1	.	.	.	.	.	.	.	.	13	4.2	14	63.0	14	4.2	15	68.8	10	4.1	10	49.2	57	16.4	60	61.7
	10	20	6.4	21	61.8	.	.	.	.	.	.	.	.	11	3.8	12	54.2	14	4.2	15	67.1	12	4.2	12	54.9	57	16.8	60	59.8
Spanish Reading	3	30	10.2	32	58.1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30	10.2	32	58.1
	4	23	6.9	24	63.0	.	.	.	.	.	.	.	.	10	3.5	10	53.8	10	3.7	10	54.6	9	3.2	8	48.4	52	15.3	53	56.7
Writing	3	.	.	.	.	18	3.1	19	75.9	25	5.6	26	78.0	.	.	.	.	.	.	.	.	.	.	.	.	43	8.3	45	77.1
	4	.	.	.	.	24	5.4	24	66.4	25	5.6	26	75.4	.	.	.	.	.	.	.	.	.	.	.	.	49	10.3	50	70.6
	5	.	.	.	.	25	5.2	25	68.5	24	5.6	26	74.3	.	.	.	.	.	.	.	.	.	.	.	.	49	10.3	51	71.2
	6	.	.	.	.	25	5.1	25	68.1	24	6.1	25	72.2	.	.	.	.	.	.	.	.	.	.	.	.	48	10.5	50	70.0
	7	.	.	.	.	24	5.2	25	67.7	23	5.7	24	71.3	.	.	.	.	.	.	.	.	.	.	.	.	48	10.3	49	69.4
	8	.	.	.	.	24	5.3	25	67.5	24	5.9	25	72.4	.	.	.	.	.	.	.	.	.	.	.	.	48	10.6	50	69.8
	9	.	.	.	.	24	5.6	24	66.7	22	6.1	23	67.8	.	.	.	.	.	.	.	.	.	.	.	.	46	11.0	48	67.2
	10	.	.	.	.	25	5.5	25	68.3	25	6.1	26	74.6	.	.	.	.	.	.	.	.	.	.	.	.	49	11.0	51	71.3
Spanish Writing	3	.	.	.	.	16	4.8	17	66.3	23	5.9	24	71.6	.	.	.	.	.	.	.	.	.	.	.	.	39	10.1	41	69.3
	4	.	.	.	.	18	5.0	19	53.6	20	5.7	19	56.2	.	.	.	.	.	.	.	.	.	.	.	.	38	9.6	37	55.0
Math - ematics	3	6	2.4	7	63.5	9	3.1	10	69.8	.	.	.	.	12	3.3	12	69.3	.	.	.	.	6	2.2	7	64.1	34	9.7	35	67.2
	4	11	4.3	11	56.9	10	3.0	11	72.7	8	3.5	9	59.9	23	4.8	24	78.5	.	.	.	.	13	3.9	14	69.2	66	17.4	68	68.6
	5	12	4.4	13	65.5	12	3.9	12	65.0	13	4.1	13	66.5	13	4.1	13	62.0	.	.	.	.	13	4.1	13	67.1	63	18.5	65	65.2
	6	10	4.4	10	56.2	11	3.9	12	62.1	9	3.4	9	58.2	12	4.1	12	56.2	.	.	.	.	9	2.9	10	69.6	52	16.7	52	59.8
	7	14	5.4	13	52.8	9	4.0	9	52.7	9	3.7	10	52.1	11	5.8	10	42.8	.	.	.	.	.	.	.	.	43	17.3	42	49.6
	8	10	5.0	9	43.4	12	4.6	12	55.7	9	3.7	10	55.5	12	5.1	11	45.8	.	.	.	.	.	.	.	.	43	16.9	42	49.6
	9	7	3.8	7	42.8	12	5.5	12	46.5	10	4.1	10	46.5	7	4.8	6	32.4	.	.	.	.	.	.	.	.	37	16.6	34	42.1
	10	6	3.3	6	39.9	11	6.0	10	42.6	9	3.5	8	41.1	8	4.9	7	34.8	.	.	.	.	.	.	.	.	34	16.1	31	39.7
Science	5	21	6.5	22	59.4	11	3.6	11	61.0	11	2.7	12	66.5	10	3.1	10	58.4	.	.	.	.	.	.	.	.	54	14.2	55	60.9
	8	21	8.3	22	55.1	9	3.8	9	44.4	9	3.8	9	46.6	9	3.5	8	40.8	.	.	.	.	.	.	.	.	48	17.3	48	48.2
	10	24	8.0	25	57.3	7	3.3	7	38.7	8	3.2	8	44.7	9	3.7	10	47.1	.	.	.	.	.	.	.	.	49	16.1	50	49.6

Table 158. Raw Score Descriptive Statistics by Subcontent Areaa

		Sub-Content Standard								Sub-Content Standard								Sub-Content Standard								Sub-Content Standard								Sub-Content Standard			
		1				2				3				4				5				6				7				8				Total			
		Mean	SD	Median	Mean % of Max	Mean	SD	Median	Mean % of Max	Mean	SD	Median	Mean % of Max	Mean	SD	Median	Mean % of Max	Mean	SD	Median	Mean % of Max	Mean	SD	Median	Mean % of Max	Mean	SD	Median	Mean % of Max	Mean	SD	Median	Mean % of Max				
Content	Grade																																				
Reading	3	13	4.8	13	58.4	11	4.6	12	56.6	7	2.3	7	69.1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	31	10.7	33	59.9		
	4	24	7.0	25	59.1	15	4.4	16	67.2	7	2.1	8	73.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	57	16.2	60	62.6			
	5	23	7.1	25	57.1	12	4.3	12	58.0	7	2.2	8	71.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	54	15.7	57	59.2			
	6	23	7.6	24	54.7	9	3.8	10	55.2	8	2.2	9	76.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	55	16.0	57	60.3			
	7	10	3.0	11	71.5	12	4.2	13	53.7	8	2.2	8	71.4	13	3.9	14	57.9	.	.	.	.	.	.	.	.	.	.	.	.	.	57	14.8	59	62.3			
	8	7	2.7	7	59.1	15	4.1	16	63.4	9	2.3	9	73.4	10	3.9	10	47.4	.	.	.	.	.	.	.	.	.	.	.	.	.	54	15.0	56	60.2			
	9	12	4.4	12	54.6	16	5.0	17	61.8	7	2.0	8	72.1	8	3.0	8	54.7	.	.	.	.	.	.	.	.	.	.	.	.	.	57	16.4	60	61.7			
	10	16	5.0	17	61.1	11	5.1	12	47.9	9	2.6	9	66.3	7	2.5	8	60.5	.	.	.	.	.	.	.	.	.	.	.	.	.	57	16.8	60	59.8			
	Spanish Reading	3	15	5.2	15	61.0	9	3.7	9	53.7	7	2.6	7	58.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30	10.2	32	58.1		
4		20	6.9	21	53.3	14	4.5	14	58.4	7	2.1	8	67.8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	52	15.3	53	56.7			
Writing	3	.	.	.	.	.	.	.	.	.	.	.	.	16	2.7	17	76.6	.	.	.	.	8	2.1	9	76.0	14	3.6	15	77.2	43	8.3	45	77.1				
	4	.	.	.	.	.	.	.	.	.	.	.	.	12	3.1	13	62.0	8	1.9	8	71.9	14	2.8	14	79.8	9	3.2	10	66.9	49	10.3	50	70.6				
	5	.	.	.	.	.	.	.	.	.	.	.	.	10	2.4	10	64.5	8	1.7	8	72.2	13	3.4	14	72.8	14	3.8	15	72.9	49	10.3	51	71.2				
	6	.	.	.	.	.	.	.	.	.	.	.	.	12	2.7	12	64.9	8	1.5	8	73.0	16	4.3	17	71.6	11	3.4	12	70.0	48	10.5	50	70.0				
	7	.	.	.	.	.	.	.	.	.	.	.	.	12	2.8	13	64.9	8	1.6	9	76.7	18	4.4	18	73.1	8	2.8	8	61.2	48	10.3	49	69.4				
	8	.	.	.	.	.	.	.	.	.	.	.	.	14	3.4	14	62.6	9	1.7	9	80.3	14	3.7	15	73.7	12	3.5	12	68.3	48	10.6	50	69.8				
	9	.	.	.	.	.	.	.	.	.	.	.	.	12	2.9	12	64.0	9	1.8	9	78.5	15	4.5	16	67.9	11	3.5	11	62.5	46	11.0	48	67.2				
	10	.	.	.	.	.	.	.	.	.	.	.	.	13	3.2	13	64.7	8	1.9	9	76.9	16	4.4	18	78.4	9	2.8	9	65.2	49	11.0	51	71.3				
	Spanish Writing	3	.	.	.	.	.	.	.	.	.	.	.	.	10	3.9	11	69.0	.	.	.	.	15	3.8	15	72.5	7	2.5	7	66.4	39	10.1	41	69.3			
4		.	.	.	.	.	.	.	.	.	.	.	.	9	3.0	9	48.2	6	2.2	7	57.8	12	3.7	12	61.6	6	2.8	6	46.0	38	9.6	37	55.0				
Math - ematics	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	34	9.7	35	67.2		
	4	17	5.8	17	59.5	9	2.9	10	72.0	8	2.2	8	74.1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	66	17.4	68	68.6			
	5	10	3.5	10	66.4	9	3.4	10	62.0	10	3.3	11	68.8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	63	18.5	65	65.2			
	6	10	4.5	10	57.7	10	3.8	10	59.3	6	2.9	6	45.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	52	16.7	52	59.8			
	7	6	3.2	6	45.1	8	4.7	6	38.4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	43	17.3	42	49.6			
	8	10	3.8	10	55.8	7	3.3	7	47.3	4	2.6	4	39.6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	43	16.9	42	49.6			
	9	7	3.9	7	42.3	7	4.4	6	38.8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	37	16.6	34	42.1			
	10	6	3.7	6	39.1	4	1.8	4	40.4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	34	16.1	31	39.7			
Science	5	10	3.3	11	61.1	9	2.8	9	63.1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	54	14.2	55	60.9		
	8	11	4.3	11	53.1	9	3.9	9	55.7	5	2.6	5	41.7	.	.	.	.	6	2.4	6	47.2	5	2.1	5	41.2	.	.	.	.	.	48	17.3	48	48.2			
	10	10	3.8	11	56.9	11	3.8	11	59.9	.	.	.	.	3	1.7	3	49.9	4	1.8	3	35.4	6	2.6	6	47.9	.	.	.	.	.	49	16.1	50	49.6			

**Table 159. Reading Grade 3 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
150	685	1.13	685	1.13	252	1	0.00	788	1.29	300	6	0.01	971	1.59
170	1	0.00	686	1.13	254	4	0.01	792	1.30	301	5	0.01	976	1.60
174	1	0.00	687	1.13	255	1	0.00	793	1.30	302	8	0.01	984	1.62
197	1	0.00	688	1.13	256	2	0.00	795	1.31	303	4	0.01	988	1.62
198	1	0.00	689	1.13	257	2	0.00	797	1.31	304	2	0.00	990	1.63
199	2	0.00	691	1.13	258	6	0.01	803	1.32	305	7	0.01	997	1.64
200	2	0.00	693	1.14	259	1	0.00	804	1.32	306	3	0.00	1000	1.64
201	3	0.00	696	1.14	260	3	0.00	807	1.33	307	6	0.01	1006	1.65
204	5	0.01	701	1.15	261	4	0.01	811	1.33	308	7	0.01	1013	1.66
205	3	0.00	704	1.16	262	5	0.01	816	1.34	309	5	0.01	1018	1.67
206	3	0.00	707	1.16	263	6	0.01	822	1.35	310	4	0.01	1022	1.68
207	2	0.00	709	1.16	264	1	0.00	823	1.35	311	5	0.01	1027	1.69
208	3	0.00	712	1.17	265	5	0.01	828	1.36	312	7	0.01	1034	1.70
209	2	0.00	714	1.17	266	5	0.01	833	1.37	313	2	0.00	1036	1.70
210	1	0.00	715	1.17	267	2	0.00	835	1.37	314	6	0.01	1042	1.71
211	3	0.00	718	1.18	268	5	0.01	840	1.38	315	3	0.00	1045	1.72
212	1	0.00	719	1.18	269	4	0.01	844	1.39	316	7	0.01	1052	1.73
213	3	0.00	722	1.19	270	6	0.01	850	1.40	317	7	0.01	1059	1.74
217	2	0.00	724	1.19	271	4	0.01	854	1.40	318	11	0.02	1070	1.76
218	5	0.01	729	1.20	272	2	0.01	858	1.41	319	7	0.01	1077	1.77
219	2	0.00	731	1.20	273	3	0.01	863	1.42	320	9	0.01	1086	1.78
220	2	0.00	733	1.20	274	4	0.01	867	1.42	321	12	0.02	1098	1.80
221	4	0.01	737	1.21	275	5	0.00	869	1.43	322	5	0.01	1103	1.81
222	2	0.00	739	1.21	276	6	0.01	875	1.44	323	10	0.02	1113	1.83
223	2	0.00	741	1.22	277	7	0.01	882	1.45	324	10	0.02	1123	1.84
224	2	0.00	743	1.22	278	4	0.01	886	1.46	325	7	0.01	1130	1.86
226	2	0.00	745	1.22	279	3	0.00	889	1.46	326	9	0.01	1139	1.87
227	5	0.01	750	1.23	280	2	0.00	891	1.46	327	9	0.01	1148	1.89
228	1	0.00	751	1.23	281	6	0.01	897	1.47	328	7	0.01	1155	1.90
229	1	0.00	752	1.24	282	2	0.00	899	1.48	329	8	0.01	1163	1.91
231	1	0.00	753	1.24	283	4	0.01	903	1.48	330	5	0.01	1168	1.92
232	4	0.01	757	1.24	284	6	0.01	909	1.49	331	11	0.02	1179	1.94
233	3	0.00	760	1.25	285	5	0.01	914	1.50	332	9	0.01	1188	1.95
234	1	0.00	761	1.25	286	5	0.01	919	1.51	333	7	0.01	1195	1.96
236	2	0.00	763	1.25	287	3	0.00	922	1.51	334	7	0.01	1202	1.97
237	2	0.00	765	1.26	288	4	0.01	926	1.52	335	10	0.02	1212	1.99
239	1	0.00	766	1.26	289	4	0.01	930	1.53	336	9	0.01	1221	2.01
241	2	0.00	768	1.26	290	5	0.01	935	1.54	337	10	0.02	1231	2.02
242	3	0.00	771	1.27	291	1	0.00	936	1.54	338	8	0.01	1239	2.04
243	1	0.00	772	1.27	292	4	0.01	940	1.54	339	13	0.02	1252	2.06
244	2	0.00	774	1.27	293	2	0.00	942	1.55	340	9	0.01	1261	2.07
245	3	0.00	777	1.28	294	2	0.00	944	1.55	341	8	0.01	1269	2.08
246	3	0.00	780	1.28	295	4	0.01	948	1.56	342	9	0.01	1278	2.10
248	2	0.00	782	1.28	296	3	0.00	951	1.56	343	13	0.02	1291	2.12
249	1	0.00	783	1.29	297	5	0.01	956	1.57	344	10	0.02	1301	2.14
250	2	0.00	785	1.29	298	6	0.01	962	1.58	345	10	0.02	1311	2.15
251	2	0.00	787	1.29	299	3	0.00	965	1.58	346	11	0.02	1322	2.17

**Table 159. Reading Grade 3 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
347	8	0.01	1330	2.18	394	32	0.05	2395	3.93	441	72	0.12	4772	7.84
348	10	0.02	1340	2.20	395	38	0.06	2433	4.00	442	78	0.13	4850	7.97
349	16	0.03	1356	2.23	396	44	0.07	2477	4.07	443	86	0.14	4936	8.11
350	23	0.04	1379	2.26	397	37	0.06	2514	4.13	444	62	0.10	4998	8.21
351	13	0.02	1392	2.29	398	38	0.06	2552	4.19	445	71	0.12	5069	8.33
352	17	0.03	1409	2.31	399	26	0.04	2578	4.23	446	69	0.11	5138	8.44
353	14	0.02	1423	2.34	400	35	0.06	2613	4.29	447	74	0.12	5212	8.56
354	17	0.03	1440	2.37	401	48	0.08	2661	4.37	448	92	0.15	5304	8.71
355	16	0.03	1456	2.39	402	40	0.07	2701	4.44	449	87	0.14	5391	8.85
356	8	0.01	1464	2.40	403	43	0.07	2744	4.51	450	78	0.13	5469	8.98
357	18	0.03	1482	2.43	404	44	0.07	2788	4.58	451	92	0.15	5561	9.13
358	20	0.03	1502	2.47	405	37	0.06	2825	4.64	452	84	0.14	5645	9.27
359	17	0.03	1519	2.49	406	38	0.06	2863	4.70	453	77	0.13	5722	9.40
360	16	0.03	1535	2.52	407	45	0.07	2908	4.78	454	73	0.12	5795	9.52
361	18	0.03	1553	2.55	408	50	0.08	2958	4.86	455	90	0.15	5885	9.67
362	21	0.03	1574	2.59	409	50	0.08	3008	4.94	456	100	0.16	5985	9.83
363	16	0.03	1590	2.61	410	42	0.07	3050	5.01	457	108	0.18	6093	10.01
364	16	0.03	1606	2.64	411	50	0.08	3100	5.09	458	107	0.18	6200	10.18
365	18	0.03	1624	2.67	412	51	0.08	3151	5.18	459	107	0.18	6307	10.36
366	16	0.03	1640	2.69	413	43	0.07	3194	5.25	460	98	0.16	6405	10.52
367	18	0.03	1658	2.72	414	57	0.09	3251	5.34	461	102	0.17	6507	10.69
368	18	0.03	1676	2.75	415	53	0.09	3304	5.43	462	81	0.13	6588	10.82
369	23	0.04	1699	2.79	416	42	0.07	3346	5.50	463	112	0.18	6700	11.00
370	30	0.05	1729	2.84	417	41	0.07	3387	5.56	464	106	0.17	6806	11.18
371	25	0.04	1754	2.88	418	41	0.07	3428	5.63	465	134	0.22	6940	11.40
372	25	0.04	1779	2.92	419	40	0.07	3468	5.70	466	118	0.19	7058	11.59
373	29	0.05	1808	2.97	420	45	0.07	3513	5.77	467	125	0.21	7183	11.80
374	14	0.02	1822	2.99	421	52	0.09	3565	5.86	468	131	0.22	7314	12.01
375	22	0.04	1844	3.03	422	60	0.10	3625	5.95	469	104	0.17	7418	12.18
376	21	0.03	1865	3.06	423	57	0.09	3682	6.05	470	108	0.18	7526	12.36
377	23	0.04	1888	3.10	424	46	0.08	3728	6.12	471	138	0.23	7664	12.59
378	24	0.04	1912	3.14	425	54	0.09	3782	6.21	472	98	0.16	7762	12.75
379	23	0.04	1935	3.18	426	48	0.08	3830	6.29	473	127	0.21	7889	12.96
380	19	0.03	1954	3.21	427	44	0.07	3874	6.36	474	123	0.20	8012	13.16
381	31	0.05	1985	3.26	428	64	0.11	3938	6.47	475	137	0.23	8149	13.38
382	40	0.07	2025	3.33	429	66	0.11	4004	6.58	476	131	0.22	8280	13.60
383	22	0.04	2047	3.36	430	71	0.12	4075	6.69	477	131	0.22	8411	13.81
384	33	0.05	2080	3.42	431	57	0.09	4132	6.79	478	145	0.24	8556	14.05
385	30	0.05	2110	3.47	432	59	0.10	4191	6.88	479	157	0.26	8713	14.31
386	28	0.05	2138	3.51	433	54	0.09	4245	6.97	480	122	0.20	8835	14.51
387	29	0.05	2167	3.56	434	58	0.10	4303	7.07	481	124	0.20	8959	14.71
388	22	0.04	2189	3.60	435	66	0.11	4369	7.18	482	137	0.23	9096	14.94
389	33	0.05	2222	3.65	436	77	0.13	4446	7.30	483	149	0.24	9245	15.18
390	39	0.06	2261	3.71	437	65	0.11	4511	7.41	484	161	0.26	9406	15.45
391	36	0.06	2297	3.77	438	62	0.10	4573	7.51	485	164	0.27	9570	15.72
392	29	0.05	2326	3.82	439	66	0.11	4639	7.62	486	159	0.26	9729	15.98
393	37	0.06	2363	3.88	440	61	0.10	4700	7.72	487	150	0.25	9879	16.23



**Table 159. Reading Grade 3 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
488	168	0.28	10047	16.50	535	316	0.52	21122	34.69	582	359	0.59	37342	61.33
489	178	0.29	10225	16.79	536	280	0.46	21402	35.15	583	364	0.60	37706	61.93
490	151	0.25	10376	17.04	537	354	0.58	21756	35.73	584	334	0.55	38040	62.48
491	187	0.31	10563	17.35	538	311	0.51	22067	36.24	585	345	0.57	38385	63.05
492	191	0.31	10754	17.66	539	282	0.46	22349	36.71	586	347	0.57	38732	63.62
493	170	0.28	10924	17.94	540	305	0.50	22654	37.21	587	339	0.56	39071	64.17
494	177	0.29	11101	18.23	541	323	0.53	22977	37.74	588	365	0.60	39436	64.77
495	169	0.28	11270	18.51	542	288	0.47	23265	38.21	589	343	0.56	39779	65.34
496	179	0.29	11449	18.80	543	317	0.52	23582	38.73	590	343	0.56	40122	65.90
497	159	0.26	11608	19.07	544	317	0.52	23899	39.25	591	378	0.62	40500	66.52
498	174	0.29	11782	19.35	545	316	0.52	24215	39.77	592	366	0.60	40866	67.12
499	198	0.33	11980	19.68	546	336	0.55	24551	40.32	593	352	0.58	41218	67.70
500	174	0.29	12154	19.96	547	334	0.55	24885	40.87	594	356	0.58	41574	68.28
501	216	0.35	12370	20.32	548	329	0.54	25214	41.41	595	369	0.61	41943	68.89
502	225	0.37	12595	20.69	549	311	0.51	25525	41.92	596	335	0.55	42278	69.44
503	229	0.38	12824	21.06	550	330	0.54	25855	42.47	597	354	0.58	42632	70.02
504	193	0.32	13017	21.38	551	333	0.55	26188	43.01	598	328	0.54	42960	70.56
505	217	0.36	13234	21.74	552	353	0.58	26541	43.59	599	333	0.55	43293	71.11
506	214	0.35	13448	22.09	553	352	0.58	26893	44.17	600	307	0.50	43600	71.61
507	219	0.36	13667	22.45	554	343	0.56	27236	44.73	601	362	0.59	43962	72.21
508	236	0.39	13903	22.84	555	355	0.58	27591	45.32	602	299	0.49	44261	72.70
509	242	0.40	14145	23.23	556	337	0.55	27928	45.87	603	354	0.58	44615	73.28
510	229	0.38	14374	23.61	557	350	0.57	28278	46.45	604	370	0.61	44985	73.89
511	227	0.37	14601	23.98	558	343	0.56	28621	47.01	605	327	0.54	45312	74.42
512	267	0.44	14868	24.42	559	402	0.66	29023	47.67	606	352	0.58	45664	75.00
513	249	0.41	15117	24.83	560	374	0.61	29397	48.28	607	327	0.54	45991	75.54
514	240	0.39	15357	25.22	561	350	0.57	29747	48.86	608	309	0.51	46300	76.05
515	234	0.38	15591	25.61	562	362	0.59	30109	49.45	609	338	0.56	46638	76.60
516	222	0.36	15813	25.97	563	345	0.57	30454	50.02	610	327	0.54	46965	77.14
517	258	0.42	16071	26.40	564	369	0.61	30823	50.63	611	335	0.55	47300	77.69
518	255	0.42	16326	26.81	565	311	0.51	31134	51.14	612	311	0.51	47611	78.20
519	256	0.42	16582	27.24	566	388	0.64	31522	51.77	613	279	0.46	47890	78.66
520	253	0.42	16835	27.65	567	368	0.60	31890	52.38	614	272	0.45	48162	79.10
521	284	0.47	17119	28.12	568	344	0.57	32234	52.94	615	287	0.47	48449	79.58
522	280	0.46	17399	28.58	569	398	0.65	32632	53.60	616	291	0.48	48740	80.05
523	266	0.44	17665	29.01	570	366	0.60	32998	54.20	617	308	0.51	49048	80.56
524	278	0.46	17943	29.47	571	356	0.58	33354	54.78	618	289	0.47	49337	81.03
525	281	0.46	18224	29.93	572	351	0.58	33705	55.36	619	300	0.49	49637	81.53
526	250	0.41	18474	30.34	573	328	0.54	34033	55.90	620	297	0.49	49934	82.01
527	263	0.43	18737	30.77	574	360	0.59	34393	56.49	621	267	0.44	50201	82.45
528	285	0.47	19022	31.24	575	375	0.62	34768	57.11	622	311	0.51	50512	82.96
529	311	0.51	19333	31.75	576	364	0.60	35132	57.70	623	291	0.48	50803	83.44
530	287	0.47	19620	32.23	577	355	0.58	35487	58.29	624	270	0.44	51073	83.89
531	295	0.48	19915	32.71	578	403	0.66	35890	58.95	625	271	0.45	51344	84.33
532	284	0.47	20199	33.18	579	379	0.62	36269	59.57	626	255	0.42	51599	84.75
533	301	0.49	20500	33.67	580	345	0.57	36614	60.14	627	243	0.40	51842	85.15
534	306	0.50	20806	34.17	581	369	0.61	36983	60.74	628	226	0.37	52068	85.52

**Table 159. Reading Grade 3 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
629	222	0.36	52290	85.88	676	67	0.11	59182	97.20	723	24	0.04	60631	99.58
630	222	0.36	52512	86.25	677	73	0.12	59255	97.32	724	7	0.01	60638	99.60
631	243	0.40	52755	86.65	678	60	0.10	59315	97.42	725	8	0.01	60646	99.61
632	250	0.41	53005	87.06	679	61	0.10	59376	97.52	726	20	0.03	60666	99.64
633	233	0.38	53238	87.44	680	56	0.09	59432	97.62	727	2	0.00	60668	99.65
634	202	0.33	53440	87.77	681	50	0.08	59482	97.70	728	6	0.01	60674	99.66
635	222	0.36	53662	88.14	682	66	0.11	59548	97.81	729	19	0.03	60693	99.69
636	203	0.33	53865	88.47	683	41	0.07	59589	97.87	730	10	0.02	60703	99.70
637	196	0.32	54061	88.79	684	36	0.06	59625	97.93	731	3	0.00	60706	99.71
638	196	0.32	54257	89.12	685	57	0.09	59682	98.03	732	11	0.02	60717	99.73
639	221	0.36	54478	89.48	686	41	0.07	59723	98.09	733	2	0.00	60719	99.73
640	178	0.29	54656	89.77	687	53	0.09	59776	98.18	734	5	0.01	60724	99.74
641	207	0.34	54863	90.11	688	50	0.08	59826	98.26	735	6	0.01	60730	99.75
642	182	0.30	55045	90.41	689	46	0.08	59872	98.34	736	10	0.02	60740	99.76
643	201	0.33	55246	90.74	690	39	0.06	59911	98.40	737	4	0.01	60744	99.77
644	184	0.30	55430	91.04	691	27	0.04	59938	98.45	738	15	0.02	60759	99.79
645	196	0.32	55626	91.36	692	18	0.03	59956	98.48	739	9	0.01	60768	99.81
646	161	0.26	55787	91.63	693	36	0.06	59992	98.53	740	3	0.00	60771	99.81
647	165	0.27	55952	91.90	694	36	0.06	60028	98.59	741	2	0.00	60773	99.82
648	165	0.27	56117	92.17	695	34	0.06	60062	98.65	743	6	0.01	60779	99.83
649	144	0.24	56261	92.41	696	23	0.04	60085	98.69	744	3	0.00	60782	99.83
650	148	0.24	56409	92.65	697	26	0.04	60111	98.73	745	1	0.00	60783	99.83
651	163	0.27	56572	92.92	698	46	0.08	60157	98.81	746	1	0.00	60784	99.84
652	159	0.26	56731	93.18	699	30	0.05	60187	98.86	747	7	0.01	60791	99.85
653	154	0.25	56885	93.43	700	35	0.06	60222	98.91	748	2	0.00	60793	99.85
654	132	0.22	57017	93.65	701	32	0.05	60254	98.97	749	3	0.00	60796	99.86
655	105	0.17	57122	93.82	702	18	0.03	60272	98.99	750	7	0.01	60803	99.87
656	121	0.20	57243	94.02	703	26	0.04	60298	99.04	751	1	0.00	60804	99.87
657	116	0.19	57359	94.21	704	19	0.03	60317	99.07	753	1	0.00	60805	99.87
658	120	0.20	57479	94.41	705	20	0.03	60337	99.10	754	6	0.01	60811	99.88
659	125	0.21	57604	94.61	706	16	0.03	60353	99.13	755	5	0.01	60816	99.89
660	107	0.18	57711	94.79	707	15	0.02	60368	99.15	756	2	0.00	60818	99.89
661	119	0.20	57830	94.98	708	26	0.04	60394	99.20	758	13	0.02	60831	99.91
662	127	0.21	57957	95.19	709	14	0.02	60408	99.22	760	1	0.00	60832	99.91
663	93	0.15	58050	95.35	710	21	0.03	60429	99.25	763	1	0.00	60833	99.92
664	118	0.19	58168	95.54	711	20	0.03	60449	99.29	767	1	0.00	60834	99.92
665	95	0.16	58263	95.70	712	7	0.01	60456	99.30	769	4	0.01	60838	99.92
666	99	0.16	58362	95.86	713	18	0.03	60474	99.33	770	2	0.00	60840	99.93
667	93	0.15	58455	96.01	714	16	0.03	60490	99.35	773	5	0.01	60845	99.94
668	88	0.14	58543	96.15	715	14	0.02	60504	99.38	774	1	0.00	60846	99.94
669	98	0.16	58641	96.32	716	11	0.02	60515	99.39	776	2	0.00	60848	99.94
670	75	0.12	58716	96.44	717	46	0.08	60561	99.47	779	3	0.00	60851	99.95
671	94	0.15	58810	96.59	718	11	0.02	60572	99.49	781	1	0.00	60852	99.95
672	83	0.14	58893	96.73	719	5	0.01	60577	99.50	784	4	0.01	60856	99.95
673	79	0.13	58972	96.86	720	13	0.02	60590	99.52	794	1	0.00	60857	99.96
674	71	0.12	59043	96.98	721	13	0.02	60603	99.54	795	27	0.04	60884	100
675	72	0.12	59115	97.09	722	4	0.01	60607	99.55					

**Table 160. Spanish Reading Grade 3 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
300	19	1.57	19	1.57	456	1	0.08	108	8.93	503	9	0.74	383	31.65
309	1	0.08	20	1.65	457	2	0.17	110	9.09	504	12	0.99	395	32.64
324	1	0.08	21	1.74	458	8	0.66	118	9.75	505	6	0.50	401	33.14
343	1	0.08	22	1.82	459	2	0.17	120	9.92	506	7	0.58	408	33.72
363	1	0.08	23	1.90	460	2	0.17	122	10.08	507	12	0.99	420	34.71
382	1	0.08	24	1.98	461	1	0.08	123	10.17	508	11	0.91	431	35.62
384	1	0.08	25	2.07	462	1	0.08	124	10.25	509	17	1.40	448	37.02
387	1	0.08	26	2.15	463	2	0.17	126	10.41	510	9	0.74	457	37.77
398	1	0.08	27	2.23	464	4	0.33	130	10.74	511	13	1.07	470	38.84
399	2	0.17	29	2.40	465	7	0.58	137	11.32	512	12	0.99	482	39.83
400	3	0.25	32	2.64	466	4	0.33	141	11.65	513	10	0.83	492	40.66
402	1	0.08	33	2.73	467	5	0.41	146	12.07	514	5	0.41	497	41.07
403	1	0.08	34	2.81	468	3	0.25	149	12.31	515	13	1.07	510	42.15
407	1	0.08	35	2.89	469	3	0.25	152	12.56	516	12	0.99	522	43.14
409	4	0.33	39	3.22	470	3	0.25	155	12.81	517	8	0.66	530	43.80
412	1	0.08	40	3.31	471	5	0.41	160	13.22	518	9	0.74	539	44.55
413	1	0.08	41	3.39	472	3	0.25	163	13.47	519	13	1.07	552	45.62
414	3	0.25	44	3.64	473	7	0.58	170	14.05	520	6	0.50	558	46.12
415	1	0.08	45	3.72	474	7	0.58	177	14.63	521	13	1.07	571	47.19
416	1	0.08	46	3.80	475	5	0.41	182	15.04	522	18	1.49	589	48.68
419	3	0.25	49	4.05	476	3	0.25	185	15.29	523	10	0.83	599	49.50
421	1	0.08	50	4.13	477	4	0.33	189	15.62	524	9	0.74	608	50.25
424	3	0.25	53	4.38	478	4	0.33	193	15.95	525	9	0.74	617	50.99
426	1	0.08	54	4.46	479	6	0.50	199	16.45	526	12	0.99	629	51.98
427	2	0.17	56	4.63	480	5	0.41	204	16.86	527	15	1.24	644	53.22
428	1	0.08	57	4.71	481	2	0.17	206	17.02	528	9	0.74	653	53.97
429	1	0.08	58	4.79	482	7	0.58	213	17.60	529	12	0.99	665	54.96
430	1	0.08	59	4.88	483	7	0.58	220	18.18	530	10	0.83	675	55.79
433	1	0.08	60	4.96	484	5	0.41	225	18.60	531	11	0.91	686	56.69
435	1	0.08	61	5.04	485	12	0.99	237	19.59	532	17	1.40	703	58.10
437	3	0.25	64	5.29	486	5	0.41	242	20.00	533	8	0.66	711	58.76
438	2	0.17	66	5.45	487	4	0.33	246	20.33	534	6	0.50	717	59.26
440	2	0.17	68	5.62	488	7	0.58	253	20.91	535	14	1.16	731	60.41
441	2	0.17	70	5.79	489	12	0.99	265	21.90	536	14	1.16	745	61.57
442	3	0.25	73	6.03	490	7	0.58	272	22.48	537	6	0.50	751	62.07
444	1	0.08	74	6.12	491	8	0.66	280	23.14	538	11	0.91	762	62.98
445	3	0.25	77	6.36	492	8	0.66	288	23.80	539	8	0.66	770	63.64
446	3	0.25	80	6.61	493	8	0.66	296	24.46	540	14	1.16	784	64.79
447	3	0.25	83	6.86	494	7	0.58	303	25.04	541	8	0.66	792	65.45
448	3	0.25	86	7.11	495	7	0.58	310	25.62	542	12	0.99	804	66.45
449	3	0.25	89	7.36	496	9	0.74	319	26.36	543	15	1.24	819	67.69
450	2	0.17	91	7.52	497	8	0.66	327	27.02	544	7	0.58	826	68.26
451	2	0.17	93	7.69	498	7	0.58	334	27.60	545	15	1.24	841	69.50
452	2	0.17	95	7.85	499	15	1.24	349	28.84	546	12	0.99	853	70.50
453	6	0.50	101	8.35	500	10	0.83	359	29.67	547	10	0.83	863	71.32
454	3	0.25	104	8.60	501	2	0.17	361	29.83	548	9	0.74	872	72.07
455	3	0.25	107	8.84	502	13	1.07	374	30.91	549	6	0.50	878	72.56

**Table 160. Spanish Reading Grade 3 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
550	3	0.25	881	72.81	598	1	0.08	1169	96.61
551	7	0.58	888	73.39	599	1	0.08	1170	96.69
552	10	0.83	898	74.21	600	2	0.17	1172	96.86
553	7	0.58	905	74.79	601	3	0.25	1175	97.11
554	15	1.24	920	76.03	602	4	0.33	1179	97.44
555	16	1.32	936	77.36	604	1	0.08	1180	97.52
556	3	0.25	939	77.60	605	5	0.41	1185	97.93
557	9	0.74	948	78.35	606	1	0.08	1186	98.02
558	7	0.58	955	78.93	607	1	0.08	1187	98.10
559	8	0.66	963	79.59	608	1	0.08	1188	98.18
560	7	0.58	970	80.17	609	2	0.17	1190	98.35
561	13	1.07	983	81.24	611	2	0.17	1192	98.51
562	6	0.50	989	81.74	612	2	0.17	1194	98.68
563	10	0.83	999	82.56	613	1	0.08	1195	98.76
564	7	0.58	1006	83.14	615	1	0.08	1196	98.84
565	8	0.66	1014	83.80	616	1	0.08	1197	98.93
566	8	0.66	1022	84.46	622	1	0.08	1198	99.01
567	10	0.83	1032	85.29	623	3	0.25	1201	99.26
568	4	0.33	1036	85.62	626	1	0.08	1202	99.34
569	7	0.58	1043	86.20	627	2	0.17	1204	99.50
570	10	0.83	1053	87.02	632	1	0.08	1205	99.59
571	9	0.74	1062	87.77	634	1	0.08	1206	99.67
572	4	0.33	1066	88.10	636	1	0.08	1207	99.75
573	9	0.74	1075	88.84	643	1	0.08	1208	99.83
574	9	0.74	1084	89.59	664	1	0.08	1209	99.92
575	8	0.66	1092	90.25	708	1	0.08	1210	100
576	4	0.33	1096	90.58					
577	7	0.58	1103	91.16					
578	5	0.41	1108	91.57					
580	5	0.41	1113	91.98					
581	2	0.17	1115	92.15					
582	3	0.25	1118	92.40					
583	9	0.74	1127	93.14					
584	5	0.41	1132	93.55					
585	3	0.25	1135	93.80					
586	2	0.17	1137	93.97					
587	2	0.17	1139	94.13					
588	3	0.25	1142	94.38					
589	5	0.41	1147	94.79					
590	3	0.25	1150	95.04					
591	2	0.17	1152	95.21					
592	3	0.25	1155	95.45					
593	2	0.17	1157	95.62					
594	2	0.17	1159	95.79					
595	3	0.25	1162	96.03					
596	3	0.25	1165	96.28					
597	3	0.25	1168	96.53					

**Table 161. Writing Grade 3 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
150	48	0.08	48	0.08	256	2	0.00	133	0.22	308	7	0.01	290	0.48
164	1	0.00	49	0.08	257	1	0.00	134	0.22	309	9	0.01	299	0.49
178	1	0.00	50	0.08	259	3	0.00	137	0.23	310	2	0.00	301	0.50
192	1	0.00	51	0.08	260	1	0.00	138	0.23	311	4	0.01	305	0.50
193	1	0.00	52	0.09	261	1	0.00	139	0.23	312	7	0.01	312	0.51
194	2	0.00	54	0.09	262	4	0.01	143	0.24	313	7	0.01	319	0.52
195	1	0.00	55	0.09	263	1	0.00	144	0.24	314	2	0.00	321	0.53
200	1	0.00	56	0.09	264	3	0.00	147	0.24	315	8	0.01	329	0.54
206	1	0.00	57	0.09	265	1	0.00	148	0.24	316	8	0.01	337	0.55
207	1	0.00	58	0.10	267	1	0.00	149	0.25	317	10	0.02	347	0.57
208	3	0.00	61	0.10	268	4	0.01	153	0.25	318	10	0.02	357	0.59
209	2	0.00	63	0.10	269	2	0.00	155	0.26	319	6	0.01	363	0.60
210	2	0.00	65	0.11	270	4	0.01	159	0.26	320	7	0.01	370	0.61
212	1	0.00	66	0.11	271	2	0.00	161	0.26	321	8	0.01	378	0.62
213	2	0.00	68	0.11	273	2	0.00	163	0.27	322	19	0.03	397	0.65
214	1	0.00	69	0.11	274	8	0.01	171	0.28	323	8	0.01	405	0.67
216	1	0.00	70	0.12	275	2	0.00	173	0.28	324	4	0.01	409	0.67
217	2	0.00	72	0.12	276	3	0.00	176	0.29	325	10	0.02	419	0.69
219	5	0.01	77	0.13	277	1	0.00	177	0.29	326	11	0.02	430	0.71
220	1	0.00	78	0.13	278	1	0.00	178	0.29	327	15	0.02	445	0.73
221	1	0.00	79	0.13	279	3	0.00	181	0.30	328	25	0.04	470	0.77
223	1	0.00	80	0.13	280	2	0.00	183	0.30	329	10	0.02	480	0.79
224	2	0.00	82	0.13	281	3	0.00	186	0.31	330	14	0.02	494	0.81
225	1	0.00	83	0.14	284	3	0.00	189	0.31	331	9	0.01	503	0.83
226	1	0.00	84	0.14	285	3	0.00	192	0.32	332	15	0.02	518	0.85
228	1	0.00	85	0.14	286	1	0.00	193	0.32	333	14	0.02	532	0.88
229	2	0.00	87	0.14	287	1	0.00	194	0.32	334	22	0.04	554	0.91
230	3	0.00	90	0.15	288	2	0.00	196	0.32	335	9	0.01	563	0.93
232	1	0.00	91	0.15	289	5	0.01	201	0.33	336	8	0.01	571	0.94
235	1	0.00	92	0.15	290	5	0.01	206	0.34	337	23	0.04	594	0.98
236	1	0.00	93	0.15	291	3	0.00	209	0.34	338	21	0.03	615	1.01
237	1	0.00	94	0.15	292	4	0.01	213	0.35	339	17	0.03	632	1.04
238	1	0.00	95	0.16	293	3	0.00	216	0.36	340	17	0.03	649	1.07
239	2	0.00	97	0.16	294	4	0.01	220	0.36	341	16	0.03	665	1.09
241	1	0.00	98	0.16	295	7	0.01	227	0.37	342	14	0.02	679	1.12
244	3	0.00	101	0.17	296	5	0.01	232	0.38	343	18	0.03	697	1.15
245	5	0.01	106	0.17	297	4	0.01	236	0.39	344	31	0.05	728	1.20
246	2	0.00	108	0.18	298	3	0.00	239	0.39	345	23	0.04	751	1.24
247	1	0.00	109	0.18	299	7	0.01	246	0.40	346	19	0.03	770	1.27
248	3	0.00	112	0.18	300	4	0.01	250	0.41	347	28	0.05	798	1.31
249	4	0.01	116	0.19	301	4	0.01	254	0.42	348	24	0.04	822	1.35
250	2	0.00	118	0.19	302	6	0.01	260	0.43	349	27	0.04	849	1.40
251	4	0.01	122	0.20	303	2	0.00	262	0.43	350	34	0.06	883	1.45
252	2	0.00	124	0.20	304	4	0.01	266	0.44	351	31	0.05	914	1.50
253	3	0.00	127	0.21	305	8	0.01	274	0.45	352	30	0.05	944	1.55
254	2	0.00	129	0.21	306	3	0.00	277	0.46	353	26	0.04	970	1.60
255	2	0.00	131	0.22	307	6	0.01	283	0.47	354	33	0.05	1003	1.65

**Table 161. Writing Grade 3 Scale Score Distribution (continued)**

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
355	39	0.06	1042	1.71	402	180	0.30	5788	9.52	449	506	0.83	22063	36.31
356	36	0.06	1078	1.77	403	190	0.31	5978	9.84	450	494	0.81	22557	37.12
357	35	0.06	1113	1.83	404	160	0.26	6138	10.10	451	463	0.76	23020	37.88
358	44	0.07	1157	1.90	405	216	0.36	6354	10.46	452	529	0.87	23549	38.75
359	46	0.08	1203	1.98	406	203	0.33	6557	10.79	453	488	0.80	24037	39.55
360	51	0.08	1254	2.06	407	218	0.36	6775	11.15	454	530	0.87	24567	40.43
361	53	0.09	1307	2.15	408	213	0.35	6988	11.50	455	546	0.90	25113	41.32
362	48	0.08	1355	2.23	409	198	0.33	7186	11.82	456	536	0.88	25649	42.21
363	62	0.10	1417	2.33	410	215	0.35	7401	12.18	457	554	0.91	26203	43.12
364	56	0.09	1473	2.42	411	261	0.43	7662	12.61	458	528	0.87	26731	43.99
365	54	0.09	1527	2.51	412	229	0.38	7891	12.99	459	566	0.93	27297	44.92
366	47	0.08	1574	2.59	413	245	0.40	8136	13.39	460	507	0.83	27804	45.75
367	70	0.12	1644	2.71	414	239	0.39	8375	13.78	461	546	0.90	28350	46.65
368	62	0.10	1706	2.81	415	263	0.43	8638	14.21	462	525	0.86	28875	47.52
369	82	0.13	1788	2.94	416	276	0.45	8914	14.67	463	550	0.91	29425	48.42
370	67	0.11	1855	3.05	417	272	0.45	9186	15.12	464	529	0.87	29954	49.29
371	73	0.12	1928	3.17	418	319	0.52	9505	15.64	465	545	0.90	30499	50.19
372	68	0.11	1996	3.28	419	321	0.53	9826	16.17	466	533	0.88	31032	51.06
373	81	0.13	2077	3.42	420	315	0.52	10141	16.69	467	593	0.98	31625	52.04
374	76	0.13	2153	3.54	421	313	0.52	10454	17.20	468	499	0.82	32124	52.86
375	80	0.13	2233	3.67	422	321	0.53	10775	17.73	469	513	0.84	32637	53.71
376	65	0.11	2298	3.78	423	337	0.55	11112	18.29	470	483	0.79	33120	54.50
377	85	0.14	2383	3.92	424	327	0.54	11439	18.82	471	540	0.89	33660	55.39
378	79	0.13	2462	4.05	425	354	0.58	11793	19.41	472	513	0.84	34173	56.23
379	95	0.16	2557	4.21	426	366	0.60	12159	20.01	473	482	0.79	34655	57.03
380	105	0.17	2662	4.38	427	323	0.53	12482	20.54	474	505	0.83	35160	57.86
381	101	0.17	2763	4.55	428	359	0.59	12841	21.13	475	540	0.89	35700	58.75
382	98	0.16	2861	4.71	429	378	0.62	13219	21.75	476	520	0.86	36220	59.60
383	104	0.17	2965	4.88	430	410	0.67	13629	22.43	477	502	0.83	36722	60.43
384	117	0.19	3082	5.07	431	381	0.63	14010	23.05	478	529	0.87	37251	61.30
385	118	0.19	3200	5.27	432	428	0.70	14438	23.76	479	493	0.81	37744	62.11
386	113	0.19	3313	5.45	433	402	0.66	14840	24.42	480	506	0.83	38250	62.94
387	115	0.19	3428	5.64	434	407	0.67	15247	25.09	481	501	0.82	38751	63.77
388	111	0.18	3539	5.82	435	398	0.65	15645	25.74	482	498	0.82	39249	64.59
389	116	0.19	3655	6.01	436	400	0.66	16045	26.40	483	472	0.78	39721	65.36
390	144	0.24	3799	6.25	437	436	0.72	16481	27.12	484	521	0.86	40242	66.22
391	137	0.23	3936	6.48	438	394	0.65	16875	27.77	485	489	0.80	40731	67.02
392	138	0.23	4074	6.70	439	471	0.78	17346	28.54	486	470	0.77	41201	67.80
393	153	0.25	4227	6.96	440	485	0.80	17831	29.34	487	468	0.77	41669	68.57
394	153	0.25	4380	7.21	441	404	0.66	18235	30.01	488	455	0.75	42124	69.32
395	156	0.26	4536	7.46	442	448	0.74	18683	30.74	489	402	0.66	42526	69.98
396	159	0.26	4695	7.73	443	462	0.76	19145	31.50	490	435	0.72	42961	70.69
397	199	0.33	4894	8.05	444	488	0.80	19633	32.31	491	452	0.74	43413	71.44
398	163	0.27	5057	8.32	445	470	0.77	20103	33.08	492	469	0.77	43882	72.21
399	191	0.31	5248	8.64	446	474	0.78	20577	33.86	493	441	0.73	44323	72.94
400	189	0.31	5437	8.95	447	478	0.79	21055	34.65	494	436	0.72	44759	73.65
401	171	0.28	5608	9.23	448	502	0.83	21557	35.47	495	397	0.65	45156	74.31

**Table 161. Writing Grade 3 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
496	394	0.65	45550	74.95	543	66	0.11	56864	93.57	590	2	0.00	60408	99.40
497	378	0.62	45928	75.58	544	46	0.08	56910	93.65	591	5	0.01	60413	99.41
498	305	0.50	46233	76.08	545	50	0.08	56960	93.73	592	1	0.00	60414	99.41
499	331	0.54	46564	76.62	546	41	0.07	57001	93.80	597	2	0.00	60416	99.42
500	373	0.61	46937	77.24	547	54	0.09	57055	93.89	598	1	0.00	60417	99.42
501	316	0.52	47253	77.76	548	87	0.14	57142	94.03	599	2	0.00	60419	99.42
502	432	0.71	47685	78.47	549	51	0.08	57193	94.11	609	4	0.01	60423	99.43
503	340	0.56	48025	79.03	550	1436	2.36	58629	96.48	611	2	0.00	60425	99.43
504	431	0.71	48456	79.74	551	90	0.15	58719	96.62	612	2	0.00	60427	99.44
505	366	0.60	48822	80.34	552	58	0.10	58777	96.72	613	52	0.09	60479	99.52
506	327	0.54	49149	80.88	553	77	0.13	58854	96.85	615	1	0.00	60480	99.52
507	321	0.53	49470	81.41	554	46	0.08	58900	96.92	616	54	0.09	60534	99.61
508	236	0.39	49706	81.79	555	68	0.11	58968	97.03	617	170	0.28	60704	99.89
509	206	0.34	49912	82.13	556	148	0.24	59116	97.28	618	2	0.00	60706	99.89
510	221	0.36	50133	82.50	557	15	0.02	59131	97.30	623	1	0.00	60707	99.90
511	229	0.38	50362	82.87	558	124	0.20	59255	97.51	626	1	0.00	60708	99.90
512	240	0.39	50602	83.27	559	12	0.02	59267	97.53	629	11	0.02	60719	99.92
513	340	0.56	50942	83.83	560	2	0.00	59269	97.53	638	2	0.00	60721	99.92
514	369	0.61	51311	84.43	561	20	0.03	59289	97.56	680	49	0.08	60770	100
515	299	0.49	51610	84.93	562	4	0.01	59293	97.57					
516	304	0.50	51914	85.43	563	6	0.01	59299	97.58					
517	474	0.78	52388	86.21	564	1	0.00	59300	97.58					
518	343	0.56	52731	86.77	565	9	0.01	59309	97.60					
519	179	0.29	52910	87.07	566	3	0.00	59312	97.60					
520	174	0.29	53084	87.35	567	6	0.01	59318	97.61					
521	174	0.29	53258	87.64	568	2	0.00	59320	97.61					
522	94	0.15	53352	87.79	569	7	0.01	59327	97.63					
523	67	0.11	53419	87.90	570	7	0.01	59334	97.64					
524	138	0.23	53557	88.13	571	10	0.02	59344	97.65					
525	218	0.36	53775	88.49	572	5	0.01	59349	97.66					
526	192	0.32	53967	88.81	573	9	0.01	59358	97.68					
527	109	0.18	54076	88.98	574	23	0.04	59381	97.71					
528	290	0.48	54366	89.46	575	24	0.04	59405	97.75					
529	303	0.50	54669	89.96	576	34	0.06	59439	97.81					
530	435	0.72	55104	90.68	577	460	0.76	59899	98.57					
531	222	0.37	55326	91.04	578	29	0.05	59928	98.61					
532	242	0.40	55568	91.44	579	328	0.54	60256	99.15					
533	228	0.38	55796	91.82	580	34	0.06	60290	99.21					
534	608	1.00	56404	92.82	581	2	0.00	60292	99.21					
535	87	0.14	56491	92.96	582	5	0.01	60297	99.22					
536	45	0.07	56536	93.03	583	29	0.05	60326	99.27					
537	97	0.16	56633	93.19	584	18	0.03	60344	99.30					
538	41	0.07	56674	93.26	585	6	0.01	60350	99.31					
539	21	0.03	56695	93.29	586	50	0.08	60400	99.39					
540	48	0.08	56743	93.37	587	2	0.00	60402	99.39					
541	19	0.03	56762	93.40	588	1	0.00	60403	99.40					
542	36	0.06	56798	93.46	589	3	0.00	60406	99.40					

**Table 162. Spanish Writing Grade 3 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
250	9	0.74	9	0.74	395	2	0.17	70	5.78	447	3	0.25	217	17.92
252	1	0.08	10	0.83	397	4	0.33	74	6.11	448	4	0.33	221	18.25
261	1	0.08	11	0.91	398	4	0.33	78	6.44	449	12	0.99	233	19.24
270	1	0.08	12	0.99	399	1	0.08	79	6.52	450	5	0.41	238	19.65
275	1	0.08	13	1.07	400	3	0.25	82	6.77	451	4	0.33	242	19.98
284	1	0.08	14	1.16	401	4	0.33	86	7.10	452	5	0.41	247	20.40
288	1	0.08	15	1.24	402	2	0.17	88	7.27	453	7	0.58	254	20.97
293	1	0.08	16	1.32	403	3	0.25	91	7.51	454	8	0.66	262	21.64
296	1	0.08	17	1.40	404	4	0.33	95	7.84	455	6	0.50	268	22.13
298	1	0.08	18	1.49	406	3	0.25	98	8.09	456	8	0.66	276	22.79
313	1	0.08	19	1.57	407	2	0.17	100	8.26	457	3	0.25	279	23.04
314	1	0.08	20	1.65	408	1	0.08	101	8.34	458	8	0.66	287	23.70
320	1	0.08	21	1.73	409	1	0.08	102	8.42	459	4	0.33	291	24.03
322	1	0.08	22	1.82	411	2	0.17	104	8.59	460	3	0.25	294	24.28
323	2	0.17	24	1.98	412	4	0.33	108	8.92	461	7	0.58	301	24.86
325	1	0.08	25	2.06	413	2	0.17	110	9.08	462	3	0.25	304	25.10
332	1	0.08	26	2.15	414	2	0.17	112	9.25	463	5	0.41	309	25.52
334	1	0.08	27	2.23	416	2	0.17	114	9.41	464	5	0.41	314	25.93
339	1	0.08	28	2.31	417	1	0.08	115	9.50	465	8	0.66	322	26.59
344	1	0.08	29	2.39	418	1	0.08	116	9.58	466	9	0.74	331	27.33
345	1	0.08	30	2.48	419	3	0.25	119	9.83	467	1	0.08	332	27.42
348	1	0.08	31	2.56	420	3	0.25	122	10.07	468	5	0.41	337	27.83
349	1	0.08	32	2.64	421	2	0.17	124	10.24	469	2	0.17	339	27.99
350	1	0.08	33	2.73	422	4	0.33	128	10.57	470	4	0.33	343	28.32
353	1	0.08	34	2.81	423	1	0.08	129	10.65	471	6	0.50	349	28.82
357	1	0.08	35	2.89	424	2	0.17	131	10.82	472	6	0.50	355	29.31
360	3	0.25	38	3.14	425	4	0.33	135	11.15	473	11	0.91	366	30.22
362	1	0.08	39	3.22	427	2	0.17	137	11.31	474	7	0.58	373	30.80
364	1	0.08	40	3.30	428	5	0.41	142	11.73	475	7	0.58	380	31.38
366	1	0.08	41	3.39	429	2	0.17	144	11.89	476	10	0.83	390	32.20
367	1	0.08	42	3.47	430	7	0.58	151	12.47	477	3	0.25	393	32.45
369	1	0.08	43	3.55	431	2	0.17	153	12.63	478	4	0.33	397	32.78
372	2	0.17	45	3.72	432	3	0.25	156	12.88	479	4	0.33	401	33.11
373	2	0.17	47	3.88	433	5	0.41	161	13.29	480	9	0.74	410	33.86
374	3	0.25	50	4.13	434	4	0.33	165	13.63	481	3	0.25	413	34.10
376	1	0.08	51	4.21	435	4	0.33	169	13.96	482	8	0.66	421	34.76
378	2	0.17	53	4.38	436	2	0.17	171	14.12	483	3	0.25	424	35.01
379	1	0.08	54	4.46	437	2	0.17	173	14.29	484	3	0.25	427	35.26
380	1	0.08	55	4.54	438	6	0.50	179	14.78	485	10	0.83	437	36.09
382	3	0.25	58	4.79	439	1	0.08	180	14.86	486	10	0.83	447	36.91
385	1	0.08	59	4.87	440	6	0.50	186	15.36	487	10	0.83	457	37.74
386	1	0.08	60	4.95	441	3	0.25	189	15.61	488	3	0.25	460	37.99
389	2	0.17	62	5.12	442	7	0.58	196	16.18	489	9	0.74	469	38.73
390	1	0.08	63	5.20	443	1	0.08	197	16.27	490	6	0.50	475	39.22
391	1	0.08	64	5.28	444	4	0.33	201	16.60	491	11	0.91	486	40.13
392	3	0.25	67	5.53	445	6	0.50	207	17.09	492	8	0.66	494	40.79
393	1	0.08	68	5.62	446	7	0.58	214	17.67	493	7	0.58	501	41.37



**Table 162. Spanish Writing Grade 3 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
494	6	0.50	507	41.87	541	8	0.66	824	68.04	588	4	0.33	1050	86.71
495	5	0.41	512	42.28	542	8	0.66	832	68.70	589	4	0.33	1054	87.04
496	13	1.07	525	43.35	543	3	0.25	835	68.95	590	3	0.25	1057	87.28
497	5	0.41	530	43.77	544	4	0.33	839	69.28	591	2	0.17	1059	87.45
498	9	0.74	539	44.51	545	6	0.50	845	69.78	592	5	0.41	1064	87.86
499	6	0.50	545	45.00	546	5	0.41	850	70.19	593	6	0.50	1070	88.36
500	7	0.58	552	45.58	547	4	0.33	854	70.52	594	1	0.08	1071	88.44
501	8	0.66	560	46.24	548	3	0.25	857	70.77	595	3	0.25	1074	88.69
502	6	0.50	566	46.74	549	3	0.25	860	71.02	596	6	0.50	1080	89.18
503	8	0.66	574	47.40	550	8	0.66	868	71.68	597	3	0.25	1083	89.43
504	4	0.33	578	47.73	551	3	0.25	871	71.92	598	2	0.17	1085	89.60
505	2	0.17	580	47.89	552	5	0.41	876	72.34	599	6	0.50	1091	90.09
506	5	0.41	585	48.31	553	7	0.58	883	72.91	600	2	0.17	1093	90.26
507	9	0.74	594	49.05	554	3	0.25	886	73.16	601	3	0.25	1096	90.50
508	11	0.91	605	49.96	555	4	0.33	890	73.49	602	1	0.08	1097	90.59
509	7	0.58	612	50.54	556	10	0.83	900	74.32	603	2	0.17	1099	90.75
510	7	0.58	619	51.11	557	8	0.66	908	74.98	604	2	0.17	1101	90.92
511	7	0.58	626	51.69	558	7	0.58	915	75.56	605	3	0.25	1104	91.16
512	7	0.58	633	52.27	559	7	0.58	922	76.14	606	2	0.17	1106	91.33
513	4	0.33	637	52.60	560	7	0.58	929	76.71	607	3	0.25	1109	91.58
514	7	0.58	644	53.18	561	4	0.33	933	77.04	608	4	0.33	1113	91.91
515	7	0.58	651	53.76	562	3	0.25	936	77.29	609	2	0.17	1115	92.07
516	5	0.41	656	54.17	563	6	0.50	942	77.79	610	2	0.17	1117	92.24
517	5	0.41	661	54.58	564	8	0.66	950	78.45	613	2	0.17	1119	92.40
518	9	0.74	670	55.33	565	7	0.58	957	79.03	614	5	0.41	1124	92.82
519	5	0.41	675	55.74	566	2	0.17	959	79.19	615	3	0.25	1127	93.06
520	6	0.50	681	56.23	567	6	0.50	965	79.69	616	3	0.25	1130	93.31
521	2	0.17	683	56.40	568	4	0.33	969	80.02	617	8	0.66	1138	93.97
522	2	0.17	685	56.56	569	4	0.33	973	80.35	618	4	0.33	1142	94.30
523	4	0.33	689	56.90	570	8	0.66	981	81.01	619	5	0.41	1147	94.72
524	7	0.58	696	57.47	571	2	0.17	983	81.17	620	2	0.17	1149	94.88
525	8	0.66	704	58.13	572	5	0.41	988	81.59	621	1	0.08	1150	94.96
526	10	0.83	714	58.96	573	5	0.41	993	82.00	622	1	0.08	1151	95.05
527	5	0.41	719	59.37	574	7	0.58	1000	82.58	623	2	0.17	1153	95.21
528	5	0.41	724	59.79	575	8	0.66	1008	83.24	624	5	0.41	1158	95.62
529	5	0.41	729	60.20	576	5	0.41	1013	83.65	625	1	0.08	1159	95.71
530	8	0.66	737	60.86	577	1	0.08	1014	83.73	626	3	0.25	1162	95.95
531	11	0.91	748	61.77	578	2	0.17	1016	83.90	629	2	0.17	1164	96.12
532	17	1.40	765	63.17	579	2	0.17	1018	84.06	630	4	0.33	1168	96.45
533	9	0.74	774	63.91	580	1	0.08	1019	84.15	631	3	0.25	1171	96.70
534	5	0.41	779	64.33	581	2	0.17	1021	84.31	632	2	0.17	1173	96.86
535	10	0.83	789	65.15	582	4	0.33	1025	84.64	633	1	0.08	1174	96.94
536	6	0.50	795	65.65	583	3	0.25	1028	84.89	635	2	0.17	1176	97.11
537	6	0.50	801	66.14	584	3	0.25	1031	85.14	636	2	0.17	1178	97.27
538	1	0.08	802	66.23	585	7	0.58	1038	85.71	637	2	0.17	1180	97.44
539	5	0.41	807	66.64	586	4	0.33	1042	86.04	638	2	0.17	1182	97.61
540	9	0.74	816	67.38	587	4	0.33	1046	86.37	640	1	0.08	1183	97.69

**Table 162. Spanish Writing Grade 3 Scale Score Distribution (continued)**

<b>SS</b>	<b>Freq</b>	<b>%</b>	<b>Cum. Freq.</b>	<b>Cum. %</b>
643	1	0.08	1184	97.77
645	2	0.17	1186	97.94
646	2	0.17	1188	98.10
647	1	0.08	1189	98.18
648	2	0.17	1191	98.35
650	1	0.08	1192	98.43
651	2	0.17	1194	98.60
652	2	0.17	1196	98.76
656	1	0.08	1197	98.84
659	1	0.08	1198	98.93
662	1	0.08	1199	99.01
663	1	0.08	1200	99.09
669	1	0.08	1201	99.17
675	2	0.17	1203	99.34
676	1	0.08	1204	99.42
697	2	0.17	1206	99.59
708	1	0.08	1207	99.67
710	2	0.17	1209	99.83
750	2	0.17	1211	100

**Table 163. Mathematics Grade 3 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
150	89	0.14	89	0.14	201	6	0.01	221	0.36	248	13	0.02	680	1.10
151	2	0.00	91	0.15	202	10	0.02	231	0.37	249	26	0.04	706	1.14
152	1	0.00	92	0.15	203	3	0.00	234	0.38	250	16	0.03	722	1.16
153	1	0.00	93	0.15	204	3	0.00	237	0.38	251	19	0.03	741	1.19
154	2	0.00	95	0.15	205	6	0.01	243	0.39	252	19	0.03	760	1.22
155	1	0.00	96	0.15	206	4	0.01	247	0.40	253	15	0.02	775	1.25
157	1	0.00	97	0.16	207	9	0.01	256	0.41	254	11	0.02	786	1.27
160	3	0.00	100	0.16	208	5	0.01	261	0.42	255	23	0.04	809	1.30
161	2	0.00	102	0.16	209	10	0.02	271	0.44	256	29	0.05	838	1.35
162	3	0.00	105	0.17	210	7	0.01	278	0.45	257	20	0.03	858	1.38
163	2	0.00	107	0.17	211	7	0.01	285	0.46	258	20	0.03	878	1.42
164	3	0.00	110	0.18	212	8	0.01	293	0.47	259	25	0.04	903	1.46
165	1	0.00	111	0.18	213	1	0.00	294	0.47	260	22	0.04	925	1.49
166	2	0.00	113	0.18	214	9	0.01	303	0.49	261	22	0.04	947	1.53
167	2	0.00	115	0.19	215	10	0.02	313	0.50	262	23	0.04	970	1.56
168	4	0.01	119	0.19	216	8	0.01	321	0.52	263	26	0.04	996	1.61
169	2	0.00	121	0.20	217	7	0.01	328	0.53	264	24	0.04	1020	1.64
170	2	0.00	123	0.20	218	4	0.01	332	0.54	265	28	0.05	1048	1.69
171	1	0.00	124	0.20	219	5	0.01	337	0.54	266	26	0.04	1074	1.73
172	3	0.00	127	0.20	220	7	0.01	344	0.55	267	29	0.05	1103	1.78
173	4	0.01	131	0.21	221	12	0.02	356	0.57	268	28	0.05	1131	1.82
174	3	0.00	134	0.22	222	10	0.02	366	0.59	269	23	0.04	1154	1.86
175	2	0.00	136	0.22	223	7	0.01	373	0.60	270	27	0.04	1181	1.90
176	2	0.00	138	0.22	224	14	0.02	387	0.62	271	29	0.05	1210	1.95
177	2	0.00	140	0.23	225	10	0.02	397	0.64	272	35	0.06	1245	2.01
178	2	0.00	142	0.23	226	8	0.01	405	0.65	273	37	0.06	1282	2.07
179	2	0.00	144	0.23	227	6	0.01	411	0.66	274	26	0.04	1308	2.11
180	1	0.00	145	0.23	228	8	0.01	419	0.68	275	35	0.06	1343	2.16
181	4	0.01	149	0.24	229	13	0.02	432	0.70	276	25	0.04	1368	2.20
182	2	0.00	151	0.24	230	7	0.01	439	0.71	277	29	0.05	1397	2.25
183	5	0.01	156	0.25	231	7	0.01	446	0.72	278	33	0.05	1430	2.30
184	6	0.01	162	0.26	232	16	0.03	462	0.74	279	41	0.07	1471	2.37
185	4	0.01	166	0.27	233	10	0.02	472	0.76	280	34	0.05	1505	2.43
186	4	0.01	170	0.27	234	13	0.02	485	0.78	281	30	0.05	1535	2.47
187	3	0.00	173	0.28	235	16	0.03	501	0.81	282	30	0.05	1565	2.52
188	2	0.00	175	0.28	236	9	0.01	510	0.82	283	41	0.07	1606	2.59
189	2	0.00	177	0.29	237	11	0.02	521	0.84	284	29	0.05	1635	2.64
190	3	0.00	180	0.29	238	17	0.03	538	0.87	285	40	0.06	1675	2.70
191	2	0.00	182	0.29	239	14	0.02	552	0.89	286	36	0.06	1711	2.76
192	5	0.01	187	0.30	240	14	0.02	566	0.91	287	42	0.07	1753	2.83
194	3	0.00	190	0.31	241	9	0.01	575	0.93	288	38	0.06	1791	2.89
195	4	0.01	194	0.31	242	15	0.02	590	0.95	289	45	0.07	1836	2.96
196	5	0.01	199	0.32	243	12	0.02	602	0.97	290	45	0.07	1881	3.03
197	6	0.01	205	0.33	244	20	0.03	622	1.00	291	45	0.07	1926	3.10
198	2	0.00	207	0.33	245	16	0.03	638	1.03	292	46	0.07	1972	3.18
199	5	0.01	212	0.34	246	18	0.03	656	1.06	293	42	0.07	2014	3.25
200	3	0.00	215	0.35	247	11	0.02	667	1.08	294	43	0.07	2057	3.32

**Table 163. Mathematics Grade 3 Scale Score Distribution (continued)**

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
295	50	0.08	2107	3.40	342	93	0.15	5667	9.13	389	188	0.30	12294	19.81
296	64	0.10	2171	3.50	343	90	0.15	5757	9.28	390	174	0.28	12468	20.10
297	59	0.10	2230	3.59	344	89	0.14	5846	9.42	391	172	0.28	12640	20.37
298	49	0.08	2279	3.67	345	104	0.17	5950	9.59	392	163	0.26	12803	20.64
299	54	0.09	2333	3.76	346	109	0.18	6059	9.77	393	175	0.28	12978	20.92
300	45	0.07	2378	3.83	347	127	0.20	6186	9.97	394	170	0.27	13148	21.19
301	53	0.09	2431	3.92	348	97	0.16	6283	10.13	395	189	0.30	13337	21.50
302	51	0.08	2482	4.00	349	128	0.21	6411	10.33	396	198	0.32	13535	21.81
303	73	0.12	2555	4.12	350	95	0.15	6506	10.49	397	203	0.33	13738	22.14
304	74	0.12	2629	4.24	351	117	0.19	6623	10.67	398	186	0.30	13924	22.44
305	71	0.11	2700	4.35	352	115	0.19	6738	10.86	399	185	0.30	14109	22.74
306	59	0.10	2759	4.45	353	110	0.18	6848	11.04	400	209	0.34	14318	23.08
307	63	0.10	2822	4.55	354	123	0.20	6971	11.24	401	175	0.28	14493	23.36
308	69	0.11	2891	4.66	355	125	0.20	7096	11.44	402	213	0.34	14706	23.70
309	48	0.08	2939	4.74	356	133	0.21	7229	11.65	403	180	0.29	14886	23.99
310	71	0.11	3010	4.85	357	131	0.21	7360	11.86	404	205	0.33	15091	24.32
311	60	0.10	3070	4.95	358	135	0.22	7495	12.08	405	199	0.32	15290	24.64
312	62	0.10	3132	5.05	359	144	0.23	7639	12.31	406	213	0.34	15503	24.99
313	89	0.14	3221	5.19	360	141	0.23	7780	12.54	407	198	0.32	15701	25.31
314	74	0.12	3295	5.31	361	127	0.20	7907	12.74	408	197	0.32	15898	25.62
315	66	0.11	3361	5.42	362	127	0.20	8034	12.95	409	205	0.33	16103	25.95
316	66	0.11	3427	5.52	363	119	0.19	8153	13.14	410	183	0.29	16286	26.25
317	76	0.12	3503	5.65	364	158	0.25	8311	13.40	411	194	0.31	16480	26.56
318	54	0.09	3557	5.73	365	142	0.23	8453	13.62	412	192	0.31	16672	26.87
319	74	0.12	3631	5.85	366	141	0.23	8594	13.85	413	211	0.34	16883	27.21
320	75	0.12	3706	5.97	367	135	0.22	8729	14.07	414	225	0.36	17108	27.57
321	87	0.14	3793	6.11	368	134	0.22	8863	14.28	415	213	0.34	17321	27.92
322	87	0.14	3880	6.25	369	145	0.23	9008	14.52	416	219	0.35	17540	28.27
323	62	0.10	3942	6.35	370	132	0.21	9140	14.73	417	226	0.36	17766	28.63
324	96	0.15	4038	6.51	371	139	0.22	9279	14.96	418	219	0.35	17985	28.99
325	88	0.14	4126	6.65	372	130	0.21	9409	15.16	419	230	0.37	18215	29.36
326	59	0.10	4185	6.75	373	146	0.24	9555	15.40	420	246	0.40	18461	29.75
327	99	0.16	4284	6.90	374	155	0.25	9710	15.65	421	223	0.36	18684	30.11
328	86	0.14	4370	7.04	375	180	0.29	9890	15.94	422	231	0.37	18915	30.49
329	86	0.14	4456	7.18	376	158	0.25	10048	16.19	423	206	0.33	19121	30.82
330	81	0.13	4537	7.31	377	148	0.24	10196	16.43	424	225	0.36	19346	31.18
331	88	0.14	4625	7.45	378	169	0.27	10365	16.71	425	232	0.37	19578	31.55
332	84	0.14	4709	7.59	379	152	0.24	10517	16.95	426	253	0.41	19831	31.96
333	88	0.14	4797	7.73	380	175	0.28	10692	17.23	427	245	0.39	20076	32.36
334	94	0.15	4891	7.88	381	173	0.28	10865	17.51	428	284	0.46	20360	32.81
335	103	0.17	4994	8.05	382	168	0.27	11033	17.78	429	227	0.37	20587	33.18
336	97	0.16	5091	8.21	383	171	0.28	11204	18.06	430	254	0.41	20841	33.59
337	96	0.15	5187	8.36	384	163	0.26	11367	18.32	431	232	0.37	21073	33.96
338	107	0.17	5294	8.53	385	163	0.26	11530	18.58	432	263	0.42	21336	34.39
339	98	0.16	5392	8.69	386	207	0.33	11737	18.92	433	224	0.36	21560	34.75
340	83	0.13	5475	8.82	387	190	0.31	11927	19.22	434	225	0.36	21785	35.11
341	99	0.16	5574	8.98	388	179	0.29	12106	19.51	435	256	0.41	22041	35.52

**Table 163. Mathematics Grade 3 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
436	247	0.40	22288	35.92	483	263	0.42	34833	56.14	530	248	0.40	46687	75.25
437	231	0.37	22519	36.29	484	242	0.39	35075	56.53	531	225	0.36	46912	75.61
438	251	0.40	22770	36.70	485	256	0.41	35331	56.94	532	206	0.33	47118	75.94
439	250	0.40	23020	37.10	486	260	0.42	35591	57.36	533	238	0.38	47356	76.33
440	262	0.42	23282	37.52	487	261	0.42	35852	57.78	534	227	0.37	47583	76.69
441	243	0.39	23525	37.92	488	252	0.41	36104	58.19	535	224	0.36	47807	77.05
442	250	0.40	23775	38.32	489	263	0.42	36367	58.61	536	206	0.33	48013	77.38
443	274	0.44	24049	38.76	490	264	0.43	36631	59.04	537	230	0.37	48243	77.75
444	245	0.39	24294	39.16	491	274	0.44	36905	59.48	538	209	0.34	48452	78.09
445	270	0.44	24564	39.59	492	255	0.41	37160	59.89	539	217	0.35	48669	78.44
446	266	0.43	24830	40.02	493	268	0.43	37428	60.32	540	231	0.37	48900	78.81
447	276	0.44	25106	40.46	494	300	0.48	37728	60.81	541	214	0.34	49114	79.16
448	233	0.38	25339	40.84	495	277	0.45	38005	61.25	542	205	0.33	49319	79.49
449	248	0.40	25587	41.24	496	296	0.48	38301	61.73	543	213	0.34	49532	79.83
450	273	0.44	25860	41.68	497	281	0.45	38582	62.18	544	184	0.30	49716	80.13
451	229	0.37	26089	42.05	498	238	0.38	38820	62.57	545	196	0.32	49912	80.44
452	273	0.44	26362	42.49	499	253	0.41	39073	62.98	546	215	0.35	50127	80.79
453	266	0.43	26628	42.92	500	276	0.44	39349	63.42	547	206	0.33	50333	81.12
454	303	0.49	26931	43.41	501	281	0.45	39630	63.87	548	171	0.28	50504	81.40
455	266	0.43	27197	43.83	502	249	0.40	39879	64.27	549	185	0.30	50689	81.70
456	273	0.44	27470	44.27	503	261	0.42	40140	64.69	550	182	0.29	50871	81.99
457	272	0.44	27742	44.71	504	229	0.37	40369	65.06	551	197	0.32	51068	82.31
458	273	0.44	28015	45.15	505	242	0.39	40611	65.45	552	208	0.34	51276	82.64
459	304	0.49	28319	45.64	506	280	0.45	40891	65.91	553	178	0.29	51454	82.93
460	282	0.45	28601	46.10	507	289	0.47	41180	66.37	554	176	0.28	51630	83.21
461	266	0.43	28867	46.53	508	238	0.38	41418	66.75	555	162	0.26	51792	83.47
462	287	0.46	29154	46.99	509	254	0.41	41672	67.16	556	172	0.28	51964	83.75
463	273	0.44	29427	47.43	510	263	0.42	41935	67.59	557	177	0.29	52141	84.04
464	281	0.45	29708	47.88	511	258	0.42	42193	68.00	558	188	0.30	52329	84.34
465	249	0.40	29957	48.28	512	238	0.38	42431	68.39	559	182	0.29	52511	84.63
466	227	0.37	30184	48.65	513	277	0.45	42708	68.83	560	170	0.27	52681	84.91
467	257	0.41	30441	49.06	514	241	0.39	42949	69.22	561	156	0.25	52837	85.16
468	269	0.43	30710	49.50	515	248	0.40	43197	69.62	562	139	0.22	52976	85.38
469	276	0.44	30986	49.94	516	219	0.35	43416	69.98	563	147	0.24	53123	85.62
470	263	0.42	31249	50.37	517	232	0.37	43648	70.35	564	157	0.25	53280	85.87
471	274	0.44	31523	50.81	518	241	0.39	43889	70.74	565	140	0.23	53420	86.10
472	274	0.44	31797	51.25	519	235	0.38	44124	71.12	566	150	0.24	53570	86.34
473	275	0.44	32072	51.69	520	221	0.36	44345	71.47	567	157	0.25	53727	86.59
474	266	0.43	32338	52.12	521	217	0.35	44562	71.82	568	163	0.26	53890	86.86
475	272	0.44	32610	52.56	522	246	0.40	44808	72.22	569	157	0.25	54047	87.11
476	269	0.43	32879	52.99	523	231	0.37	45039	72.59	570	148	0.24	54195	87.35
477	296	0.48	33175	53.47	524	223	0.36	45262	72.95	571	155	0.25	54350	87.60
478	276	0.44	33451	53.91	525	227	0.37	45489	73.32	572	140	0.23	54490	87.82
479	281	0.45	33732	54.37	526	228	0.37	45717	73.68	573	158	0.25	54648	88.08
480	275	0.44	34007	54.81	527	228	0.37	45945	74.05	574	147	0.24	54795	88.31
481	250	0.40	34257	55.21	528	240	0.39	46185	74.44	575	146	0.24	54941	88.55
482	313	0.50	34570	55.72	529	254	0.41	46439	74.85	576	123	0.20	55064	88.75

**Table 163. Mathematics Grade 3 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
577	134	0.22	55198	88.96	624	117	0.19	59441	95.80	671	2	0.00	61059	98.41
578	119	0.19	55317	89.16	625	44	0.07	59485	95.87	672	18	0.03	61077	98.44
579	113	0.18	55430	89.34	626	55	0.09	59540	95.96	673	7	0.01	61084	98.45
580	122	0.20	55552	89.54	627	39	0.06	59579	96.03	674	7	0.01	61091	98.46
581	103	0.17	55655	89.70	628	27	0.04	59606	96.07	676	12	0.02	61103	98.48
582	123	0.20	55778	89.90	629	43	0.07	59649	96.14	681	14	0.02	61117	98.50
583	95	0.15	55873	90.05	630	22	0.04	59671	96.17	682	167	0.27	61284	98.77
584	149	0.24	56022	90.29	631	32	0.05	59703	96.23	683	4	0.01	61288	98.78
585	130	0.21	56152	90.50	632	115	0.19	59818	96.41	684	5	0.01	61293	98.79
586	168	0.27	56320	90.77	633	38	0.06	59856	96.47	685	14	0.02	61307	98.81
587	128	0.21	56448	90.98	634	25	0.04	59881	96.51	687	1	0.00	61308	98.81
588	109	0.18	56557	91.15	635	70	0.11	59951	96.63	688	2	0.00	61310	98.82
589	100	0.16	56657	91.32	636	19	0.03	59970	96.66	691	4	0.01	61314	98.82
590	107	0.17	56764	91.49	637	38	0.06	60008	96.72	692	1	0.00	61315	98.82
591	104	0.17	56868	91.66	638	26	0.04	60034	96.76	693	11	0.02	61326	98.84
592	90	0.15	56958	91.80	639	9	0.01	60043	96.77	694	1	0.00	61327	98.84
593	80	0.13	57038	91.93	640	33	0.05	60076	96.83	697	7	0.01	61334	98.85
594	92	0.15	57130	92.08	641	55	0.09	60131	96.92	698	5	0.01	61339	98.86
595	84	0.14	57214	92.21	642	103	0.17	60234	97.08	699	8	0.01	61347	98.88
596	117	0.19	57331	92.40	643	18	0.03	60252	97.11	700	698	1.12	62045	100
597	79	0.13	57410	92.53	644	123	0.20	60375	97.31					
598	101	0.16	57511	92.69	645	27	0.04	60402	97.35					
599	78	0.13	57589	92.82	646	45	0.07	60447	97.42					
600	90	0.15	57679	92.96	647	4	0.01	60451	97.43					
601	73	0.12	57752	93.08	648	6	0.01	60457	97.44					
602	147	0.24	57899	93.32	649	9	0.01	60466	97.46					
603	73	0.12	57972	93.44	650	25	0.04	60491	97.50					
604	94	0.15	58066	93.59	651	65	0.10	60556	97.60					
605	82	0.13	58148	93.72	652	22	0.04	60578	97.64					
606	52	0.08	58200	93.80	653	17	0.03	60595	97.66					
607	60	0.10	58260	93.90	654	36	0.06	60631	97.72					
608	72	0.12	58332	94.02	655	63	0.10	60694	97.82					
609	58	0.09	58390	94.11	656	44	0.07	60738	97.89					
610	110	0.18	58500	94.29	657	48	0.08	60786	97.97					
611	68	0.11	58568	94.40	658	26	0.04	60812	98.01					
612	51	0.08	58619	94.48	659	5	0.01	60817	98.02					
613	39	0.06	58658	94.54	660	7	0.01	60824	98.03					
614	68	0.11	58726	94.65	661	29	0.05	60853	98.08					
615	75	0.12	58801	94.77	662	21	0.03	60874	98.11					
616	69	0.11	58870	94.88	663	19	0.03	60893	98.14					
617	108	0.17	58978	95.06	664	7	0.01	60900	98.15					
618	71	0.11	59049	95.17	665	9	0.01	60909	98.17					
619	64	0.10	59113	95.27	666	12	0.02	60921	98.19					
620	53	0.09	59166	95.36	667	101	0.16	61022	98.35					
621	61	0.10	59227	95.46	668	24	0.04	61046	98.39					
622	48	0.08	59275	95.54	669	7	0.01	61053	98.40					
623	49	0.08	59324	95.61	670	4	0.01	61057	98.41					

**Table 164. Reading Grade 4 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
180	308	0.50	308	0.50	331	3	0.00	371	0.61	381	5	0.01	547	0.90
183	1	0.00	309	0.51	332	3	0.00	374	0.61	382	6	0.01	553	0.91
198	1	0.00	310	0.51	333	1	0.00	375	0.61	383	5	0.01	558	0.91
206	1	0.00	311	0.51	334	1	0.00	376	0.62	384	7	0.01	565	0.92
208	1	0.00	312	0.51	335	1	0.00	377	0.62	385	3	0.00	568	0.93
214	1	0.00	313	0.51	336	4	0.01	381	0.62	386	7	0.01	575	0.94
217	1	0.00	314	0.51	338	2	0.00	383	0.63	387	5	0.01	580	0.95
219	1	0.00	315	0.52	339	3	0.00	386	0.63	388	7	0.01	587	0.96
222	2	0.00	317	0.52	340	4	0.01	390	0.64	389	10	0.02	597	0.98
223	1	0.00	318	0.52	341	2	0.00	392	0.64	390	8	0.01	605	0.99
226	1	0.00	319	0.52	342	4	0.01	396	0.65	391	5	0.01	610	1.00
227	1	0.00	320	0.52	344	4	0.01	400	0.65	392	14	0.02	624	1.02
234	1	0.00	321	0.53	345	3	0.00	403	0.66	393	3	0.00	627	1.03
236	2	0.00	323	0.53	346	5	0.01	408	0.67	394	5	0.01	632	1.03
238	1	0.00	324	0.53	347	5	0.01	413	0.68	395	10	0.02	642	1.05
244	1	0.00	325	0.53	348	1	0.00	414	0.68	396	11	0.02	653	1.07
245	2	0.00	327	0.54	349	2	0.00	416	0.68	397	5	0.01	658	1.08
246	1	0.00	328	0.54	350	4	0.01	420	0.69	398	10	0.02	668	1.09
247	1	0.00	329	0.54	351	3	0.00	423	0.69	399	8	0.01	676	1.11
248	2	0.00	331	0.54	352	3	0.00	426	0.70	400	10	0.02	686	1.12
252	1	0.00	332	0.54	353	3	0.00	429	0.70	401	6	0.01	692	1.13
255	1	0.00	333	0.55	354	2	0.00	431	0.71	402	7	0.01	699	1.14
270	1	0.00	334	0.55	355	4	0.01	435	0.71	403	13	0.02	712	1.17
271	1	0.00	335	0.55	356	2	0.00	437	0.72	404	9	0.01	721	1.18
272	1	0.00	336	0.55	357	1	0.00	438	0.72	405	12	0.02	733	1.20
280	1	0.00	337	0.55	358	1	0.00	439	0.72	406	9	0.01	742	1.21
282	1	0.00	338	0.55	360	6	0.01	445	0.73	407	10	0.02	752	1.23
287	1	0.00	339	0.55	361	3	0.00	448	0.73	408	15	0.02	767	1.26
292	2	0.00	341	0.56	362	3	0.00	451	0.74	409	18	0.03	785	1.28
298	1	0.00	342	0.56	363	3	0.00	454	0.74	410	10	0.02	795	1.30
300	1	0.00	343	0.56	364	3	0.00	457	0.75	411	10	0.02	805	1.32
304	1	0.00	344	0.56	365	7	0.01	464	0.76	412	16	0.03	821	1.34
306	1	0.00	345	0.56	366	6	0.01	470	0.77	413	11	0.02	832	1.36
308	1	0.00	346	0.57	367	7	0.01	477	0.78	414	8	0.01	840	1.38
309	2	0.00	348	0.57	368	8	0.01	485	0.79	415	5	0.01	845	1.38
310	1	0.00	349	0.57	369	5	0.01	490	0.80	416	16	0.03	861	1.41
311	2	0.00	351	0.57	370	8	0.01	498	0.82	417	18	0.03	879	1.44
316	2	0.00	353	0.58	371	1	0.00	499	0.82	418	12	0.02	891	1.46
317	2	0.00	355	0.58	372	5	0.01	504	0.83	419	20	0.03	911	1.49
318	1	0.00	356	0.58	373	5	0.01	509	0.83	420	16	0.03	927	1.52
321	1	0.00	357	0.58	374	7	0.01	516	0.84	421	14	0.02	941	1.54
324	1	0.00	358	0.59	375	5	0.01	521	0.85	422	17	0.03	958	1.57
326	1	0.00	359	0.59	376	3	0.00	524	0.86	423	17	0.03	975	1.60
327	2	0.00	361	0.59	377	5	0.01	529	0.87	424	21	0.03	996	1.63
328	2	0.00	363	0.59	378	5	0.01	534	0.87	425	8	0.01	1004	1.64
329	2	0.00	365	0.60	379	5	0.01	539	0.88	426	14	0.02	1018	1.67
330	3	0.00	368	0.60	380	3	0.00	542	0.89	427	20	0.03	1038	1.70

**Table 164. Reading Grade 4 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
428	12	0.02	1050	1.72	475	54	0.09	2534	4.15	522	164	0.27	7062	11.56
429	12	0.02	1062	1.74	476	46	0.08	2580	4.22	523	182	0.30	7244	11.86
430	16	0.03	1078	1.76	477	58	0.09	2638	4.32	524	161	0.26	7405	12.12
431	20	0.03	1098	1.80	478	51	0.08	2689	4.40	525	163	0.27	7568	12.39
432	24	0.04	1122	1.84	479	62	0.10	2751	4.50	526	174	0.28	7742	12.67
433	16	0.03	1138	1.86	480	58	0.09	2809	4.60	527	195	0.32	7937	12.99
434	10	0.02	1148	1.88	481	56	0.09	2865	4.69	528	189	0.31	8126	13.30
435	20	0.03	1168	1.91	482	73	0.12	2938	4.81	529	183	0.30	8309	13.60
436	23	0.04	1191	1.95	483	55	0.09	2993	4.90	530	177	0.29	8486	13.89
437	28	0.05	1219	2.00	484	60	0.10	3053	5.00	531	205	0.34	8691	14.23
438	24	0.04	1243	2.03	485	65	0.11	3118	5.10	532	198	0.32	8889	14.55
439	18	0.03	1261	2.06	486	58	0.09	3176	5.20	533	187	0.31	9076	14.86
440	26	0.04	1287	2.11	487	60	0.10	3236	5.30	534	211	0.35	9287	15.20
441	19	0.03	1306	2.14	488	71	0.12	3307	5.41	535	203	0.33	9490	15.53
442	30	0.05	1336	2.19	489	63	0.10	3370	5.52	536	239	0.39	9729	15.93
443	27	0.04	1363	2.23	490	79	0.13	3449	5.65	537	207	0.34	9936	16.26
444	23	0.04	1386	2.27	491	75	0.12	3524	5.77	538	231	0.38	10167	16.64
445	20	0.03	1406	2.30	492	88	0.14	3612	5.91	539	240	0.39	10407	17.04
446	18	0.03	1424	2.33	493	82	0.13	3694	6.05	540	238	0.39	10645	17.43
447	14	0.02	1438	2.35	494	71	0.12	3765	6.16	541	233	0.38	10878	17.81
448	43	0.07	1481	2.42	495	87	0.14	3852	6.31	542	267	0.44	11145	18.24
449	32	0.05	1513	2.48	496	94	0.15	3946	6.46	543	257	0.42	11402	18.66
450	35	0.06	1548	2.53	497	83	0.14	4029	6.60	544	236	0.39	11638	19.05
451	18	0.03	1566	2.56	498	78	0.13	4107	6.72	545	246	0.40	11884	19.45
452	20	0.03	1586	2.60	499	92	0.15	4199	6.87	546	305	0.50	12189	19.95
453	29	0.05	1615	2.64	500	90	0.15	4289	7.02	547	278	0.46	12467	20.41
454	22	0.04	1637	2.68	501	100	0.16	4389	7.18	548	282	0.46	12749	20.87
455	29	0.05	1666	2.73	502	103	0.17	4492	7.35	549	259	0.42	13008	21.29
456	28	0.05	1694	2.77	503	95	0.16	4587	7.51	550	265	0.43	13273	21.73
457	35	0.06	1729	2.83	504	99	0.16	4686	7.67	551	296	0.48	13569	22.21
458	39	0.06	1768	2.89	505	115	0.19	4801	7.86	552	298	0.49	13867	22.70
459	42	0.07	1810	2.96	506	101	0.17	4902	8.02	553	282	0.46	14149	23.16
460	32	0.05	1842	3.02	507	115	0.19	5017	8.21	554	321	0.53	14470	23.69
461	31	0.05	1873	3.07	508	113	0.18	5130	8.40	555	317	0.52	14787	24.21
462	42	0.07	1915	3.13	509	125	0.20	5255	8.60	556	306	0.50	15093	24.71
463	41	0.07	1956	3.20	510	133	0.22	5388	8.82	557	313	0.51	15406	25.22
464	49	0.08	2005	3.28	511	111	0.18	5499	9.00	558	347	0.57	15753	25.79
465	44	0.07	2049	3.35	512	146	0.24	5645	9.24	559	342	0.56	16095	26.35
466	44	0.07	2093	3.43	513	139	0.23	5784	9.47	560	329	0.54	16424	26.88
467	52	0.09	2145	3.51	514	144	0.24	5928	9.70	561	354	0.58	16778	27.46
468	35	0.06	2180	3.57	515	115	0.19	6043	9.89	562	355	0.58	17133	28.05
469	51	0.08	2231	3.65	516	126	0.21	6169	10.10	563	356	0.58	17489	28.63
470	40	0.07	2271	3.72	517	125	0.20	6294	10.30	564	364	0.60	17853	29.22
471	46	0.08	2317	3.79	518	144	0.24	6438	10.54	565	369	0.60	18222	29.83
472	54	0.09	2371	3.88	519	152	0.25	6590	10.79	566	362	0.59	18584	30.42
473	54	0.09	2425	3.97	520	144	0.24	6734	11.02	567	399	0.65	18983	31.07
474	55	0.09	2480	4.06	521	164	0.27	6898	11.29	568	374	0.61	19357	31.69



**Table 164. Reading Grade 4 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
569	390	0.64	19747	32.32	616	471	0.77	42635	69.79	663	184	0.30	58037	95.00
570	411	0.67	20158	33.00	617	459	0.75	43094	70.54	664	176	0.29	58213	95.29
571	374	0.61	20532	33.61	618	450	0.74	43544	71.28	665	139	0.23	58352	95.52
572	408	0.67	20940	34.28	619	455	0.74	43999	72.02	666	134	0.22	58486	95.74
573	399	0.65	21339	34.93	620	472	0.77	44471	72.80	667	143	0.23	58629	95.97
574	453	0.74	21792	35.67	621	442	0.72	44913	73.52	668	124	0.20	58753	96.17
575	401	0.66	22193	36.33	622	451	0.74	45364	74.26	669	129	0.21	58882	96.39
576	430	0.70	22623	37.03	623	438	0.72	45802	74.97	670	102	0.17	58984	96.55
577	454	0.74	23077	37.78	624	447	0.73	46249	75.71	671	111	0.18	59095	96.73
578	483	0.79	23560	38.57	625	403	0.66	46652	76.37	672	112	0.18	59207	96.92
579	451	0.74	24011	39.30	626	429	0.70	47081	77.07	673	98	0.16	59305	97.08
580	467	0.76	24478	40.07	627	419	0.69	47500	77.75	674	102	0.17	59407	97.25
581	464	0.76	24942	40.83	628	446	0.73	47946	78.48	675	90	0.15	59497	97.39
582	420	0.69	25362	41.52	629	386	0.63	48332	79.12	676	90	0.15	59587	97.54
583	444	0.73	25806	42.24	630	431	0.71	48763	79.82	677	84	0.14	59671	97.68
584	480	0.79	26286	43.03	631	416	0.68	49179	80.50	678	77	0.13	59748	97.80
585	476	0.78	26762	43.81	632	402	0.66	49581	81.16	679	84	0.14	59832	97.94
586	451	0.74	27213	44.55	633	411	0.67	49992	81.83	680	80	0.13	59912	98.07
587	498	0.82	27711	45.36	634	398	0.65	50390	82.48	681	79	0.13	59991	98.20
588	501	0.82	28212	46.18	635	352	0.58	50742	83.06	682	68	0.11	60059	98.31
589	521	0.85	28733	47.03	636	371	0.61	51113	83.67	683	68	0.11	60127	98.42
590	484	0.79	29217	47.83	637	343	0.56	51456	84.23	684	57	0.09	60184	98.52
591	499	0.82	29716	48.64	638	378	0.62	51834	84.85	685	55	0.09	60239	98.61
592	507	0.83	30223	49.47	639	362	0.59	52196	85.44	686	47	0.08	60286	98.68
593	487	0.80	30710	50.27	640	338	0.55	52534	85.99	687	41	0.07	60327	98.75
594	510	0.83	31220	51.10	641	309	0.51	52843	86.50	688	38	0.06	60365	98.81
595	510	0.83	31730	51.94	642	316	0.52	53159	87.02	689	50	0.08	60415	98.90
596	523	0.86	32253	52.80	643	341	0.56	53500	87.58	690	37	0.06	60452	98.96
597	484	0.79	32737	53.59	644	305	0.50	53805	88.07	691	41	0.07	60493	99.02
598	520	0.85	33257	54.44	645	292	0.48	54097	88.55	692	31	0.05	60524	99.07
599	522	0.85	33779	55.29	646	278	0.46	54375	89.01	693	31	0.05	60555	99.12
600	547	0.90	34326	56.19	647	290	0.47	54665	89.48	694	38	0.06	60593	99.19
601	546	0.89	34872	57.08	648	249	0.41	54914	89.89	695	35	0.06	60628	99.24
602	515	0.84	35387	57.93	649	249	0.41	55163	90.30	696	40	0.07	60668	99.31
603	502	0.82	35889	58.75	650	276	0.45	55439	90.75	697	17	0.03	60685	99.34
604	519	0.85	36408	59.60	651	255	0.42	55694	91.17	698	16	0.03	60701	99.36
605	531	0.87	36939	60.47	652	203	0.33	55897	91.50	699	18	0.03	60719	99.39
606	527	0.86	37466	61.33	653	202	0.33	56099	91.83	700	27	0.04	60746	99.44
607	500	0.82	37966	62.15	654	222	0.36	56321	92.19	701	14	0.02	60760	99.46
608	535	0.88	38501	63.02	655	204	0.33	56525	92.53	702	29	0.05	60789	99.51
609	512	0.84	39013	63.86	656	197	0.32	56722	92.85	703	24	0.04	60813	99.55
610	515	0.84	39528	64.70	657	176	0.29	56898	93.14	704	20	0.03	60833	99.58
611	552	0.90	40080	65.61	658	236	0.39	57134	93.52	705	14	0.02	60847	99.60
612	536	0.88	40616	66.49	659	174	0.28	57308	93.81	706	27	0.04	60874	99.65
613	519	0.85	41135	67.34	660	183	0.30	57491	94.11	707	16	0.03	60890	99.67
614	524	0.86	41659	68.19	661	199	0.33	57690	94.43	708	14	0.02	60904	99.70
615	505	0.83	42164	69.02	662	163	0.27	57853	94.70	709	13	0.02	60917	99.72

**Table 164. Reading Grade 4 Scale Score Distribution (continued)**

SS	Freq.	%	Cum. Freq.	Cum. %
710	7	0.01	60924	99.73
711	15	0.02	60939	99.75
712	11	0.02	60950	99.77
713	7	0.01	60957	99.78
714	7	0.01	60964	99.79
715	11	0.02	60975	99.81
716	11	0.02	60986	99.83
717	8	0.01	60994	99.84
718	11	0.02	61005	99.86
719	4	0.01	61009	99.87
720	6	0.01	61015	99.88
721	4	0.01	61019	99.88
722	7	0.01	61026	99.90
723	5	0.01	61031	99.90
724	6	0.01	61037	99.91
725	5	0.01	61042	99.92
726	4	0.01	61046	99.93
727	2	0.00	61048	99.93
728	4	0.01	61052	99.94
729	2	0.00	61054	99.94
730	2	0.00	61056	99.94
731	3	0.00	61059	99.95
732	4	0.01	61063	99.96
733	2	0.00	61065	99.96
734	1	0.00	61066	99.96
735	2	0.00	61068	99.96
736	2	0.00	61070	99.97
737	2	0.00	61072	99.97
739	3	0.00	61075	99.98
741	1	0.00	61076	99.98
742	1	0.00	61077	99.98
744	1	0.00	61078	99.98
746	1	0.00	61079	99.98
747	2	0.00	61081	99.99
748	1	0.00	61082	99.99
749	1	0.00	61083	99.99
750	1	0.00	61084	99.99
755	1	0.00	61085	99.99
756	1	0.00	61086	99.99
758	1	0.00	61087	100
761	1	0.00	61088	100
762	1	0.00	61089	100
778	1	0.00	61090	100

**Table 165. Spanish Reading Grade 4 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
369	1	0.88	1	0.88	553	6	5.31	82	72.57					
405	1	0.88	2	1.77	556	1	0.88	83	73.45					
432	1	0.88	3	2.65	557	1	0.88	84	74.34					
458	1	0.88	4	3.54	559	2	1.77	86	76.11					
460	1	0.88	5	4.42	560	1	0.88	87	76.99					
463	1	0.88	6	5.31	561	1	0.88	88	77.88					
466	1	0.88	7	6.19	562	1	0.88	89	78.76					
468	2	1.77	9	7.96	563	1	0.88	90	79.65					
472	1	0.88	10	8.85	565	1	0.88	91	80.53					
476	2	1.77	12	10.62	566	1	0.88	92	81.42					
477	2	1.77	14	12.39	567	1	0.88	93	82.30					
490	1	0.88	15	13.27	568	1	0.88	94	83.19					
491	1	0.88	16	14.16	569	2	1.77	96	84.96					
492	1	0.88	17	15.04	570	1	0.88	97	85.84					
493	1	0.88	18	15.93	571	1	0.88	98	86.73					
494	1	0.88	19	16.81	573	1	0.88	99	87.61					
495	1	0.88	20	17.70	574	2	1.77	101	89.38					
497	2	1.77	22	19.47	578	2	1.77	103	91.15					
500	1	0.88	23	20.35	580	2	1.77	105	92.92					
509	2	1.77	25	22.12	582	1	0.88	106	93.81					
510	1	0.88	26	23.01	584	1	0.88	107	94.69					
514	1	0.88	27	23.89	585	1	0.88	108	95.58					
515	1	0.88	28	24.78	589	1	0.88	109	96.46					
516	2	1.77	30	26.55	595	1	0.88	110	97.35					
517	1	0.88	31	27.43	605	1	0.88	111	98.23					
518	4	3.54	35	30.97	612	1	0.88	112	99.12					
521	2	1.77	37	32.74	635	1	0.88	113	100					
522	1	0.88	38	33.63										
523	4	3.54	42	37.17										
525	2	1.77	44	38.94										
526	2	1.77	46	40.71										
527	2	1.77	48	42.48										
530	2	1.77	50	44.25										
532	2	1.77	52	46.02										
533	1	0.88	53	46.90										
535	1	0.88	54	47.79										
537	2	1.77	56	49.56										
538	2	1.77	58	51.33										
540	2	1.77	60	53.10										
542	4	3.54	64	56.64										
546	3	2.65	67	59.29										
547	2	1.77	69	61.06										
548	1	0.88	70	61.95										
549	3	2.65	73	64.60										
550	1	0.88	74	65.49										
551	1	0.88	75	66.37										
552	1	0.88	76	67.26										

**Table 166. Writing Grade 4 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
190	5	0.01	5	0.01	313	2	0.00	84	0.14	360	30	0.05	604	0.99
193	1	0.00	6	0.01	314	2	0.00	86	0.14	361	29	0.05	633	1.04
199	1	0.00	7	0.01	315	2	0.00	88	0.14	362	27	0.04	660	1.08
200	1	0.00	8	0.01	316	4	0.01	92	0.15	363	31	0.05	691	1.13
208	1	0.00	9	0.01	317	2	0.00	94	0.15	364	21	0.03	712	1.17
209	1	0.00	10	0.02	318	6	0.01	100	0.16	365	36	0.06	748	1.22
227	1	0.00	11	0.02	319	4	0.01	104	0.17	366	34	0.06	782	1.28
236	1	0.00	12	0.02	320	5	0.01	109	0.18	367	34	0.06	816	1.34
241	1	0.00	13	0.02	321	3	0.00	112	0.18	368	28	0.05	844	1.38
242	1	0.00	14	0.02	322	5	0.01	117	0.19	369	44	0.07	888	1.45
243	1	0.00	15	0.02	323	4	0.01	121	0.20	370	37	0.06	925	1.51
249	1	0.00	16	0.03	324	3	0.00	124	0.20	371	42	0.07	967	1.58
252	1	0.00	17	0.03	325	1	0.00	125	0.20	372	49	0.08	1016	1.66
253	1	0.00	18	0.03	326	7	0.01	132	0.22	373	54	0.09	1070	1.75
254	1	0.00	19	0.03	327	6	0.01	138	0.23	374	41	0.07	1111	1.82
259	1	0.00	20	0.03	328	4	0.01	142	0.23	375	53	0.09	1164	1.91
263	1	0.00	21	0.03	329	12	0.02	154	0.25	376	56	0.09	1220	2.00
264	2	0.00	23	0.04	330	6	0.01	160	0.26	377	41	0.07	1261	2.06
270	2	0.00	25	0.04	331	5	0.01	165	0.27	378	70	0.11	1331	2.18
272	1	0.00	26	0.04	332	4	0.01	169	0.28	379	59	0.10	1390	2.27
275	1	0.00	27	0.04	333	6	0.01	175	0.29	380	55	0.09	1445	2.37
278	1	0.00	28	0.05	334	5	0.01	180	0.29	381	45	0.07	1490	2.44
280	2	0.00	30	0.05	335	10	0.02	190	0.31	382	46	0.08	1536	2.51
282	2	0.00	32	0.05	336	7	0.01	197	0.32	383	59	0.10	1595	2.61
283	1	0.00	33	0.05	337	8	0.01	205	0.34	384	53	0.09	1648	2.70
285	2	0.00	35	0.06	338	11	0.02	216	0.35	385	68	0.11	1716	2.81
286	3	0.00	38	0.06	339	11	0.02	227	0.37	386	49	0.08	1765	2.89
287	1	0.00	39	0.06	340	15	0.02	242	0.40	387	62	0.10	1827	2.99
288	3	0.00	42	0.07	341	8	0.01	250	0.41	388	87	0.14	1914	3.13
289	2	0.00	44	0.07	342	13	0.02	263	0.43	389	85	0.14	1999	3.27
291	1	0.00	45	0.07	343	15	0.02	278	0.45	390	77	0.13	2076	3.40
292	1	0.00	46	0.08	344	12	0.02	290	0.47	391	90	0.15	2166	3.55
293	2	0.00	48	0.08	345	10	0.02	300	0.49	392	92	0.15	2258	3.70
294	2	0.00	50	0.08	346	14	0.02	314	0.51	393	89	0.15	2347	3.84
298	2	0.00	52	0.09	347	13	0.02	327	0.54	394	94	0.15	2441	4.00
299	2	0.00	54	0.09	348	17	0.03	344	0.56	395	85	0.14	2526	4.13
300	4	0.01	58	0.09	349	20	0.03	364	0.60	396	112	0.18	2638	4.32
301	1	0.00	59	0.10	350	25	0.04	389	0.64	397	111	0.18	2749	4.50
302	2	0.00	61	0.10	351	18	0.03	407	0.67	398	115	0.19	2864	4.69
303	1	0.00	62	0.10	352	12	0.02	419	0.69	399	72	0.12	2936	4.81
304	3	0.00	65	0.11	353	17	0.03	436	0.71	400	110	0.18	3046	4.99
307	2	0.00	67	0.11	354	18	0.03	454	0.74	401	103	0.17	3149	5.15
308	3	0.00	70	0.11	355	24	0.04	478	0.78	402	107	0.18	3256	5.33
309	4	0.01	74	0.12	356	23	0.04	501	0.82	403	120	0.20	3376	5.53
310	1	0.00	75	0.12	357	25	0.04	526	0.86	404	112	0.18	3488	5.71
311	4	0.01	79	0.13	358	23	0.04	549	0.90	405	106	0.17	3594	5.88
312	3	0.00	82	0.13	359	25	0.04	574	0.94	406	122	0.20	3716	6.08

**Table 166. Writing Grade 4 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
407	132	0.22	3848	6.30	454	409	0.67	16172	26.47	501	457	0.75	38413	62.87
408	143	0.23	3991	6.53	455	450	0.74	16622	27.21	502	493	0.81	38906	63.68
409	157	0.26	4148	6.79	456	396	0.65	17018	27.85	503	494	0.81	39400	64.49
410	167	0.27	4315	7.06	457	419	0.69	17437	28.54	504	462	0.76	39862	65.24
411	170	0.28	4485	7.34	458	402	0.66	17839	29.20	505	436	0.71	40298	65.96
412	152	0.25	4637	7.59	459	380	0.62	18219	29.82	506	436	0.71	40734	66.67
413	168	0.27	4805	7.86	460	428	0.70	18647	30.52	507	486	0.80	41220	67.46
414	154	0.25	4959	8.12	461	447	0.73	19094	31.25	508	459	0.75	41679	68.22
415	158	0.26	5117	8.37	462	455	0.74	19549	32.00	509	426	0.70	42105	68.91
416	174	0.28	5291	8.66	463	437	0.72	19986	32.71	510	433	0.71	42538	69.62
417	192	0.31	5483	8.97	464	472	0.77	20458	33.48	511	409	0.67	42947	70.29
418	191	0.31	5674	9.29	465	407	0.67	20865	34.15	512	441	0.72	43388	71.01
419	165	0.27	5839	9.56	466	452	0.74	21317	34.89	513	432	0.71	43820	71.72
420	184	0.30	6023	9.86	467	420	0.69	21737	35.58	514	404	0.66	44224	72.38
421	229	0.37	6252	10.23	468	470	0.77	22207	36.35	515	430	0.70	44654	73.08
422	210	0.34	6462	10.58	469	521	0.85	22728	37.20	516	418	0.68	45072	73.77
423	214	0.35	6676	10.93	470	445	0.73	23173	37.93	517	407	0.67	45479	74.43
424	209	0.34	6885	11.27	471	450	0.74	23623	38.66	518	392	0.64	45871	75.08
425	233	0.38	7118	11.65	472	506	0.83	24129	39.49	519	383	0.63	46254	75.70
426	252	0.41	7370	12.06	473	475	0.78	24604	40.27	520	402	0.66	46656	76.36
427	222	0.36	7592	12.43	474	491	0.80	25095	41.07	521	397	0.65	47053	77.01
428	216	0.35	7808	12.78	475	474	0.78	25569	41.85	522	349	0.57	47402	77.58
429	270	0.44	8078	13.22	476	483	0.79	26052	42.64	523	353	0.58	47755	78.16
430	245	0.40	8323	13.62	477	484	0.79	26536	43.43	524	375	0.61	48130	78.77
431	278	0.45	8601	14.08	478	473	0.77	27009	44.21	525	355	0.58	48485	79.35
432	275	0.45	8876	14.53	479	518	0.85	27527	45.05	526	342	0.56	48827	79.91
433	246	0.40	9122	14.93	480	508	0.83	28035	45.88	527	350	0.57	49177	80.49
434	286	0.47	9408	15.40	481	504	0.82	28539	46.71	528	347	0.57	49524	81.06
435	272	0.45	9680	15.84	482	510	0.83	29049	47.54	529	319	0.52	49843	81.58
436	280	0.46	9960	16.30	483	505	0.83	29554	48.37	530	313	0.51	50156	82.09
437	297	0.49	10257	16.79	484	518	0.85	30072	49.22	531	298	0.49	50454	82.58
438	288	0.47	10545	17.26	485	516	0.84	30588	50.06	532	320	0.52	50774	83.10
439	293	0.48	10838	17.74	486	489	0.80	31077	50.86	533	292	0.48	51066	83.58
440	309	0.51	11147	18.24	487	493	0.81	31570	51.67	534	293	0.48	51359	84.06
441	272	0.45	11419	18.69	488	513	0.84	32083	52.51	535	279	0.46	51638	84.52
442	323	0.53	11742	19.22	489	479	0.78	32562	53.29	536	278	0.45	51916	84.97
443	339	0.55	12081	19.77	490	480	0.79	33042	54.08	537	284	0.46	52200	85.44
444	325	0.53	12406	20.30	491	462	0.76	33504	54.84	538	305	0.50	52505	85.93
445	330	0.54	12736	20.84	492	501	0.82	34005	55.66	539	278	0.45	52783	86.39
446	367	0.60	13103	21.45	493	504	0.82	34509	56.48	540	260	0.43	53043	86.81
447	345	0.56	13448	22.01	494	514	0.84	35023	57.32	541	222	0.36	53265	87.18
448	382	0.63	13830	22.64	495	498	0.82	35521	58.14	542	212	0.35	53477	87.53
449	409	0.67	14239	23.30	496	467	0.76	35988	58.90	543	226	0.37	53703	87.90
450	359	0.59	14598	23.89	497	474	0.78	36462	59.68	544	258	0.42	53961	88.32
451	382	0.63	14980	24.52	498	509	0.83	36971	60.51	545	241	0.39	54202	88.71
452	384	0.63	15364	25.15	499	493	0.81	37464	61.32	546	222	0.36	54424	89.08
453	399	0.65	15763	25.80	500	492	0.81	37956	62.12	547	239	0.39	54663	89.47

**Table 166. Writing Grade 4 Scale Score Distribution (continued)**

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
548	215	0.35	54878	89.82	595	45	0.07	59906	98.05	642	3	0.00	60879	99.64
549	211	0.35	55089	90.16	596	55	0.09	59961	98.14	644	4	0.01	60883	99.65
550	200	0.33	55289	90.49	597	29	0.05	59990	98.18	645	5	0.01	60888	99.65
551	177	0.29	55466	90.78	598	48	0.08	60038	98.26	646	3	0.00	60891	99.66
552	176	0.29	55642	91.07	599	41	0.07	60079	98.33	647	5	0.01	60896	99.67
553	180	0.29	55822	91.36	600	43	0.07	60122	98.40	648	8	0.01	60904	99.68
554	176	0.29	55998	91.65	601	31	0.05	60153	98.45	651	2	0.00	60906	99.68
555	164	0.27	56162	91.92	602	22	0.04	60175	98.49	652	2	0.00	60908	99.69
556	158	0.26	56320	92.18	603	29	0.05	60204	98.54	653	2	0.00	60910	99.69
557	159	0.26	56479	92.44	604	25	0.04	60229	98.58	654	11	0.02	60921	99.71
558	141	0.23	56620	92.67	605	33	0.05	60262	98.63	655	24	0.04	60945	99.75
559	161	0.26	56781	92.93	606	26	0.04	60288	98.67	656	9	0.01	60954	99.76
560	146	0.24	56927	93.17	607	23	0.04	60311	98.71	657	16	0.03	60970	99.79
561	149	0.24	57076	93.42	608	14	0.02	60325	98.73	658	3	0.00	60973	99.79
562	113	0.18	57189	93.60	609	20	0.03	60345	98.77	660	8	0.01	60981	99.81
563	146	0.24	57335	93.84	610	23	0.04	60368	98.80	661	6	0.01	60987	99.82
564	133	0.22	57468	94.06	611	24	0.04	60392	98.84	662	23	0.04	61010	99.85
565	101	0.17	57569	94.22	612	19	0.03	60411	98.87	665	1	0.00	61011	99.86
566	114	0.19	57683	94.41	613	18	0.03	60429	98.90	667	2	0.00	61013	99.86
567	143	0.23	57826	94.64	614	56	0.09	60485	99.00	671	1	0.00	61014	99.86
568	132	0.22	57958	94.86	615	9	0.01	60494	99.01	672	1	0.00	61015	99.86
569	87	0.14	58045	95.00	616	25	0.04	60519	99.05	673	1	0.00	61016	99.86
570	93	0.15	58138	95.15	617	14	0.02	60533	99.07	683	1	0.00	61017	99.87
571	94	0.15	58232	95.31	618	19	0.03	60552	99.10	684	3	0.00	61020	99.87
572	105	0.17	58337	95.48	619	13	0.02	60565	99.13	687	1	0.00	61021	99.87
573	86	0.14	58423	95.62	620	15	0.02	60580	99.15	697	16	0.03	61037	99.90
574	107	0.18	58530	95.80	621	9	0.01	60589	99.17	698	17	0.03	61054	99.93
575	88	0.14	58618	95.94	622	17	0.03	60606	99.19	701	5	0.01	61059	99.93
576	101	0.17	58719	96.10	623	9	0.01	60615	99.21	702	13	0.02	61072	99.96
577	74	0.12	58793	96.23	624	11	0.02	60626	99.23	712	11	0.02	61083	99.97
578	76	0.12	58869	96.35	625	13	0.02	60639	99.25	730	16	0.03	61099	100
579	83	0.14	58952	96.49	626	7	0.01	60646	99.26					
580	66	0.11	59018	96.59	627	5	0.01	60651	99.27					
581	62	0.10	59080	96.70	628	10	0.02	60661	99.28					
582	70	0.11	59150	96.81	629	22	0.04	60683	99.32					
583	63	0.10	59213	96.91	630	17	0.03	60700	99.35					
584	53	0.09	59266	97.00	631	13	0.02	60713	99.37					
585	95	0.16	59361	97.16	632	65	0.11	60778	99.47					
586	76	0.12	59437	97.28	633	10	0.02	60788	99.49					
587	73	0.12	59510	97.40	634	22	0.04	60810	99.53					
588	63	0.10	59573	97.50	635	20	0.03	60830	99.56					
589	50	0.08	59623	97.58	636	4	0.01	60834	99.57					
590	46	0.08	59669	97.66	637	8	0.01	60842	99.58					
591	50	0.08	59719	97.74	638	9	0.01	60851	99.59					
592	63	0.10	59782	97.84	639	2	0.00	60853	99.60					
593	37	0.06	59819	97.91	640	14	0.02	60867	99.62					
594	42	0.07	59861	97.97	641	9	0.01	60876	99.64					

**Table 167. Spanish Writing Grade 4 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
351	1	0.88	1	0.88	525	5	4.42	71	62.83					
408	1	0.88	2	1.77	526	2	1.77	73	64.60					
415	1	0.88	3	2.65	527	2	1.77	75	66.37					
430	1	0.88	4	3.54	529	2	1.77	77	68.14					
436	1	0.88	5	4.42	531	2	1.77	79	69.91					
447	1	0.88	6	5.31	536	1	0.88	80	70.80					
462	1	0.88	7	6.19	537	1	0.88	81	71.68					
466	1	0.88	8	7.08	538	1	0.88	82	72.57					
467	2	1.77	10	8.85	540	2	1.77	84	74.34					
470	1	0.88	11	9.73	542	1	0.88	85	75.22					
471	1	0.88	12	10.62	544	3	2.65	88	77.88					
473	1	0.88	13	11.50	545	2	1.77	90	79.65					
474	1	0.88	14	12.39	546	1	0.88	91	80.53					
475	1	0.88	15	13.27	547	3	2.65	94	83.19					
476	1	0.88	16	14.16	548	2	1.77	96	84.96					
482	2	1.77	18	15.93	549	1	0.88	97	85.84					
483	1	0.88	19	16.81	551	2	1.77	99	87.61					
484	1	0.88	20	17.70	552	1	0.88	100	88.50					
486	1	0.88	21	18.58	553	1	0.88	101	89.38					
489	1	0.88	22	19.47	556	1	0.88	102	90.27					
492	1	0.88	23	20.35	557	1	0.88	103	91.15					
493	2	1.77	25	22.12	558	1	0.88	104	92.04					
494	1	0.88	26	23.01	559	2	1.77	106	93.81					
495	2	1.77	28	24.78	563	2	1.77	108	95.58					
497	1	0.88	29	25.66	569	1	0.88	109	96.46					
498	1	0.88	30	26.55	570	1	0.88	110	97.35					
499	2	1.77	32	28.32	585	1	0.88	111	98.23					
500	2	1.77	34	30.09	593	1	0.88	112	99.12					
501	2	1.77	36	31.86	611	1	0.88	113	100					
505	2	1.77	38	33.63										
506	3	2.65	41	36.28										
508	1	0.88	42	37.17										
509	1	0.88	43	38.05										
510	1	0.88	44	38.94										
511	3	2.65	47	41.59										
512	1	0.88	48	42.48										
513	2	1.77	50	44.25										
514	1	0.88	51	45.13										
515	2	1.77	53	46.90										
516	2	1.77	55	48.67										
517	2	1.77	57	50.44										
518	2	1.77	59	52.21										
519	1	0.88	60	53.10										
521	1	0.88	61	53.98										
522	3	2.65	64	56.64										
523	1	0.88	65	57.52										
524	1	0.88	66	58.41										

**Table 168. Mathematics Grade 4 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
180	54	0.09	54	0.09	233	4	0.01	168	0.27	280	13	0.02	537	0.88
181	2	0.00	56	0.09	234	3	0.00	171	0.28	281	14	0.02	551	0.90
182	1	0.00	57	0.09	235	6	0.01	177	0.29	282	12	0.02	563	0.92
183	2	0.00	59	0.10	236	2	0.00	179	0.29	283	16	0.03	579	0.95
184	1	0.00	60	0.10	237	8	0.01	187	0.31	284	14	0.02	593	0.97
186	1	0.00	61	0.10	238	5	0.01	192	0.31	285	14	0.02	607	0.99
187	2	0.00	63	0.10	239	3	0.00	195	0.32	286	16	0.03	623	1.02
188	2	0.00	65	0.11	240	6	0.01	201	0.33	287	15	0.02	638	1.04
189	2	0.00	67	0.11	241	5	0.01	206	0.34	288	13	0.02	651	1.06
190	1	0.00	68	0.11	242	3	0.00	209	0.34	289	14	0.02	665	1.09
192	1	0.00	69	0.11	243	2	0.00	211	0.34	290	18	0.03	683	1.11
193	2	0.00	71	0.12	244	7	0.01	218	0.36	291	14	0.02	697	1.14
194	4	0.01	75	0.12	245	4	0.01	222	0.36	292	14	0.02	711	1.16
195	1	0.00	76	0.12	246	5	0.01	227	0.37	293	18	0.03	729	1.19
197	4	0.01	80	0.13	247	5	0.01	232	0.38	294	20	0.03	749	1.22
198	2	0.00	82	0.13	248	10	0.02	242	0.40	295	24	0.04	773	1.26
199	3	0.00	85	0.14	249	5	0.01	247	0.40	296	35	0.06	808	1.32
200	2	0.00	87	0.14	250	4	0.01	251	0.41	297	10	0.02	818	1.34
201	1	0.00	88	0.14	251	8	0.01	259	0.42	298	20	0.03	838	1.37
202	1	0.00	89	0.15	252	2	0.00	261	0.43	299	16	0.03	854	1.39
203	1	0.00	90	0.15	253	10	0.02	271	0.44	300	18	0.03	872	1.42
204	3	0.00	93	0.15	254	3	0.00	274	0.45	301	20	0.03	892	1.46
205	2	0.00	95	0.16	255	7	0.01	281	0.46	302	26	0.04	918	1.50
206	2	0.00	97	0.16	256	4	0.01	285	0.47	303	19	0.03	937	1.53
207	1	0.00	98	0.16	257	5	0.01	290	0.47	304	16	0.03	953	1.56
208	2	0.00	100	0.16	258	12	0.02	302	0.49	305	19	0.03	972	1.59
210	4	0.01	104	0.17	259	11	0.02	313	0.51	306	30	0.05	1002	1.64
211	2	0.00	106	0.17	260	11	0.02	324	0.53	307	24	0.04	1026	1.67
212	2	0.00	108	0.18	261	6	0.01	330	0.54	308	26	0.04	1052	1.72
213	1	0.00	109	0.18	262	11	0.02	341	0.56	309	22	0.04	1074	1.75
214	4	0.01	113	0.18	263	4	0.01	345	0.56	310	25	0.04	1099	1.79
215	2	0.00	115	0.19	264	6	0.01	351	0.57	311	21	0.03	1120	1.83
217	1	0.00	116	0.19	265	8	0.01	359	0.59	312	21	0.03	1141	1.86
218	2	0.00	118	0.19	266	10	0.02	369	0.60	313	22	0.04	1163	1.90
219	4	0.01	122	0.20	267	14	0.02	383	0.63	314	28	0.05	1191	1.94
220	5	0.01	127	0.21	268	9	0.01	392	0.64	315	27	0.04	1218	1.99
221	3	0.00	130	0.21	269	9	0.01	401	0.65	316	35	0.06	1253	2.05
222	4	0.01	134	0.22	270	8	0.01	409	0.67	317	32	0.05	1285	2.10
223	4	0.01	138	0.23	271	12	0.02	421	0.69	318	26	0.04	1311	2.14
224	3	0.00	141	0.23	272	9	0.01	430	0.70	319	32	0.05	1343	2.19
225	4	0.01	145	0.24	273	11	0.02	441	0.72	320	25	0.04	1368	2.23
226	2	0.00	147	0.24	274	14	0.02	455	0.74	321	33	0.05	1401	2.29
227	4	0.01	151	0.25	275	11	0.02	466	0.76	322	21	0.03	1422	2.32
228	1	0.00	152	0.25	276	14	0.02	480	0.78	323	30	0.05	1452	2.37
229	7	0.01	159	0.26	277	12	0.02	492	0.80	324	42	0.07	1494	2.44
230	4	0.01	163	0.27	278	16	0.03	508	0.83	325	29	0.05	1523	2.49
232	1	0.00	164	0.27	279	16	0.03	524	0.86	326	36	0.06	1559	2.54



**Table 168. Mathematics Grade 4 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
327	41	0.07	1600	2.61	374	79	0.13	4368	7.13	421	173	0.28	10635	17.36
328	33	0.05	1633	2.67	375	95	0.16	4463	7.29	422	183	0.30	10818	17.66
329	39	0.06	1672	2.73	376	88	0.14	4551	7.43	423	195	0.32	11013	17.98
330	26	0.04	1698	2.77	377	82	0.13	4633	7.56	424	179	0.29	11192	18.27
331	36	0.06	1734	2.83	378	103	0.17	4736	7.73	425	196	0.32	11388	18.59
332	54	0.09	1788	2.92	379	106	0.17	4842	7.90	426	198	0.32	11586	18.91
333	33	0.05	1821	2.97	380	93	0.15	4935	8.06	427	180	0.29	11766	19.21
334	44	0.07	1865	3.04	381	104	0.17	5039	8.23	428	189	0.31	11955	19.52
335	43	0.07	1908	3.11	382	106	0.17	5145	8.40	429	196	0.32	12151	19.84
336	43	0.07	1951	3.18	383	98	0.16	5243	8.56	430	214	0.35	12365	20.18
337	42	0.07	1993	3.25	384	95	0.16	5338	8.71	431	194	0.32	12559	20.50
338	50	0.08	2043	3.34	385	114	0.19	5452	8.90	432	216	0.35	12775	20.85
339	37	0.06	2080	3.40	386	93	0.15	5545	9.05	433	179	0.29	12954	21.15
340	36	0.06	2116	3.45	387	99	0.16	5644	9.21	434	222	0.36	13176	21.51
341	48	0.08	2164	3.53	388	119	0.19	5763	9.41	435	223	0.36	13399	21.87
342	47	0.08	2211	3.61	389	111	0.18	5874	9.59	436	196	0.32	13595	22.19
343	45	0.07	2256	3.68	390	103	0.17	5977	9.76	437	218	0.36	13813	22.55
344	55	0.09	2311	3.77	391	140	0.23	6117	9.99	438	242	0.40	14055	22.94
345	55	0.09	2366	3.86	392	120	0.20	6237	10.18	439	240	0.39	14295	23.34
346	55	0.09	2421	3.95	393	118	0.19	6355	10.37	440	209	0.34	14504	23.68
347	63	0.10	2484	4.05	394	128	0.21	6483	10.58	441	220	0.36	14724	24.04
348	47	0.08	2531	4.13	395	133	0.22	6616	10.80	442	242	0.40	14966	24.43
349	35	0.06	2566	4.19	396	122	0.20	6738	11.00	443	240	0.39	15206	24.82
350	62	0.10	2628	4.29	397	133	0.22	6871	11.22	444	245	0.40	15451	25.22
351	59	0.10	2687	4.39	398	131	0.21	7002	11.43	445	250	0.41	15701	25.63
352	65	0.11	2752	4.49	399	165	0.27	7167	11.70	446	252	0.41	15953	26.04
353	63	0.10	2815	4.60	400	142	0.23	7309	11.93	447	241	0.39	16194	26.44
354	70	0.11	2885	4.71	401	173	0.28	7482	12.21	448	223	0.36	16417	26.80
355	53	0.09	2938	4.80	402	123	0.20	7605	12.41	449	235	0.38	16652	27.18
356	57	0.09	2995	4.89	403	141	0.23	7746	12.64	450	256	0.42	16908	27.60
357	52	0.08	3047	4.97	404	127	0.21	7873	12.85	451	292	0.48	17200	28.08
358	48	0.08	3095	5.05	405	139	0.23	8012	13.08	452	233	0.38	17433	28.46
359	60	0.10	3155	5.15	406	151	0.25	8163	13.33	453	264	0.43	17697	28.89
360	51	0.08	3206	5.23	407	136	0.22	8299	13.55	454	269	0.44	17966	29.33
361	82	0.13	3288	5.37	408	164	0.27	8463	13.82	455	274	0.45	18240	29.78
362	81	0.13	3369	5.50	409	150	0.24	8613	14.06	456	246	0.40	18486	30.18
363	75	0.12	3444	5.62	410	184	0.30	8797	14.36	457	248	0.40	18734	30.58
364	85	0.14	3529	5.76	411	143	0.23	8940	14.59	458	278	0.45	19012	31.04
365	79	0.13	3608	5.89	412	163	0.27	9103	14.86	459	298	0.49	19310	31.52
366	84	0.14	3692	6.03	413	138	0.23	9241	15.09	460	297	0.48	19607	32.01
367	85	0.14	3777	6.17	414	169	0.28	9410	15.36	461	264	0.43	19871	32.44
368	68	0.11	3845	6.28	415	177	0.29	9587	15.65	462	257	0.42	20128	32.86
369	77	0.13	3922	6.40	416	180	0.29	9767	15.94	463	279	0.46	20407	33.31
370	96	0.16	4018	6.56	417	175	0.29	9942	16.23	464	290	0.47	20697	33.79
371	78	0.13	4096	6.69	418	169	0.28	10111	16.51	465	253	0.41	20950	34.20
372	98	0.16	4194	6.85	419	175	0.29	10286	16.79	466	246	0.40	21196	34.60
373	95	0.16	4289	7.00	420	176	0.29	10462	17.08	467	286	0.47	21482	35.07

**Table 168. Mathematics Grade 4 Scale Score Distribution (continued))**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
468	292	0.48	21774	35.54	515	322	0.53	36632	59.80	562	216	0.35	50155	81.87
469	280	0.46	22054	36.00	516	357	0.58	36989	60.38	563	255	0.42	50410	82.29
470	305	0.50	22359	36.50	517	309	0.50	37298	60.89	564	221	0.36	50631	82.65
471	288	0.47	22647	36.97	518	329	0.54	37627	61.42	565	212	0.35	50843	83.00
472	258	0.42	22905	37.39	519	322	0.53	37949	61.95	566	239	0.39	51082	83.39
473	342	0.56	23247	37.95	520	348	0.57	38297	62.52	567	268	0.44	51350	83.82
474	318	0.52	23565	38.47	521	298	0.49	38595	63.00	568	197	0.32	51547	84.15
475	291	0.48	23856	38.94	522	320	0.52	38915	63.53	569	212	0.35	51759	84.49
476	269	0.44	24125	39.38	523	280	0.46	39195	63.98	570	230	0.38	51989	84.87
477	321	0.52	24446	39.91	524	319	0.52	39514	64.50	571	225	0.37	52214	85.23
478	303	0.49	24749	40.40	525	294	0.48	39808	64.98	572	206	0.34	52420	85.57
479	327	0.53	25076	40.93	526	301	0.49	40109	65.47	573	224	0.37	52644	85.94
480	305	0.50	25381	41.43	527	308	0.50	40417	65.98	574	203	0.33	52847	86.27
481	300	0.49	25681	41.92	528	328	0.54	40745	66.51	575	235	0.38	53082	86.65
482	336	0.55	26017	42.47	529	302	0.49	41047	67.01	576	198	0.32	53280	86.97
483	306	0.50	26323	42.97	530	326	0.53	41373	67.54	577	177	0.29	53457	87.26
484	314	0.51	26637	43.48	531	295	0.48	41668	68.02	578	191	0.31	53648	87.58
485	341	0.56	26978	44.04	532	274	0.45	41942	68.47	579	191	0.31	53839	87.89
486	317	0.52	27295	44.56	533	342	0.56	42284	69.02	580	186	0.30	54025	88.19
487	330	0.54	27625	45.10	534	288	0.47	42572	69.50	581	183	0.30	54208	88.49
488	315	0.51	27940	45.61	535	288	0.47	42860	69.97	582	163	0.27	54371	88.76
489	312	0.51	28252	46.12	536	318	0.52	43178	70.48	583	185	0.30	54556	89.06
490	301	0.49	28553	46.61	537	283	0.46	43461	70.95	584	183	0.30	54739	89.36
491	293	0.48	28846	47.09	538	309	0.50	43770	71.45	585	164	0.27	54903	89.62
492	326	0.53	29172	47.62	539	298	0.49	44068	71.94	586	144	0.24	55047	89.86
493	332	0.54	29504	48.16	540	276	0.45	44344	72.39	587	141	0.23	55188	90.09
494	313	0.51	29817	48.67	541	286	0.47	44630	72.85	588	165	0.27	55353	90.36
495	350	0.57	30167	49.25	542	306	0.50	44936	73.35	589	135	0.22	55488	90.58
496	310	0.51	30477	49.75	543	285	0.47	45221	73.82	590	154	0.25	55642	90.83
497	326	0.53	30803	50.28	544	285	0.47	45506	74.28	591	138	0.23	55780	91.06
498	333	0.54	31136	50.83	545	289	0.47	45795	74.76	592	145	0.24	55925	91.29
499	350	0.57	31486	51.40	546	274	0.45	46069	75.20	593	130	0.21	56055	91.50
500	342	0.56	31828	51.96	547	301	0.49	46370	75.69	594	121	0.20	56176	91.70
501	329	0.54	32157	52.49	548	283	0.46	46653	76.16	595	124	0.20	56300	91.90
502	323	0.53	32480	53.02	549	271	0.44	46924	76.60	596	145	0.24	56445	92.14
503	287	0.47	32767	53.49	550	267	0.44	47191	77.04	597	143	0.23	56588	92.37
504	323	0.53	33090	54.02	551	257	0.42	47448	77.45	598	130	0.21	56718	92.59
505	335	0.55	33425	54.56	552	247	0.40	47695	77.86	599	94	0.15	56812	92.74
506	321	0.52	33746	55.09	553	239	0.39	47934	78.25	600	124	0.20	56936	92.94
507	315	0.51	34061	55.60	554	253	0.41	48187	78.66	601	126	0.21	57062	93.15
508	344	0.56	34405	56.16	555	258	0.42	48445	79.08	602	116	0.19	57178	93.34
509	349	0.57	34754	56.73	556	250	0.41	48695	79.49	603	116	0.19	57294	93.53
510	318	0.52	35072	57.25	557	257	0.42	48952	79.91	604	108	0.18	57402	93.70
511	329	0.54	35401	57.79	558	258	0.42	49210	80.33	605	123	0.20	57525	93.90
512	283	0.46	35684	58.25	559	251	0.41	49461	80.74	606	106	0.17	57631	94.08
513	320	0.52	36004	58.77	560	250	0.41	49711	81.15	607	94	0.15	57725	94.23
514	306	0.50	36310	59.27	561	228	0.37	49939	81.52	608	93	0.15	57818	94.38

**Table 168. Mathematics Grade 4 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
609	96	0.16	57914	94.54	656	28	0.05	60361	98.53	703	14	0.02	61008	99.59
610	83	0.14	57997	94.68	657	34	0.06	60395	98.59	704	6	0.01	61014	99.60
611	95	0.16	58092	94.83	658	28	0.05	60423	98.64	705	12	0.02	61026	99.62
612	91	0.15	58183	94.98	659	28	0.05	60451	98.68	706	1	0.00	61027	99.62
613	93	0.15	58276	95.13	660	28	0.05	60479	98.73	707	2	0.00	61029	99.62
614	84	0.14	58360	95.27	661	21	0.03	60500	98.76	708	2	0.00	61031	99.63
615	79	0.13	58439	95.40	662	21	0.03	60521	98.80	709	6	0.01	61037	99.64
616	76	0.12	58515	95.52	663	16	0.03	60537	98.82	710	11	0.02	61048	99.66
617	56	0.09	58571	95.61	664	20	0.03	60557	98.85	711	13	0.02	61061	99.68
618	77	0.13	58648	95.74	665	19	0.03	60576	98.89	712	16	0.03	61077	99.70
619	63	0.10	58711	95.84	666	12	0.02	60588	98.90	713	2	0.00	61079	99.71
620	70	0.11	58781	95.95	667	21	0.03	60609	98.94	714	3	0.00	61082	99.71
621	74	0.12	58855	96.08	668	25	0.04	60634	98.98	715	4	0.01	61086	99.72
622	55	0.09	58910	96.17	669	16	0.03	60650	99.01	716	3	0.00	61089	99.72
623	72	0.12	58982	96.28	670	11	0.02	60661	99.02	717	1	0.00	61090	99.72
624	66	0.11	59048	96.39	671	17	0.03	60678	99.05	719	5	0.01	61095	99.73
625	62	0.10	59110	96.49	672	13	0.02	60691	99.07	724	3	0.00	61098	99.74
626	61	0.10	59171	96.59	673	14	0.02	60705	99.10	728	4	0.01	61102	99.74
627	58	0.09	59229	96.69	674	22	0.04	60727	99.13	729	2	0.00	61104	99.75
628	63	0.10	59292	96.79	675	4	0.01	60731	99.14	731	2	0.00	61106	99.75
629	59	0.10	59351	96.89	676	12	0.02	60743	99.16	741	24	0.04	61130	99.79
630	61	0.10	59412	96.98	677	9	0.01	60752	99.17	743	2	0.00	61132	99.79
631	42	0.07	59454	97.05	678	24	0.04	60776	99.21	745	13	0.02	61145	99.81
632	61	0.10	59515	97.15	679	16	0.03	60792	99.24	746	18	0.03	61163	99.84
633	53	0.09	59568	97.24	680	18	0.03	60810	99.27	748	1	0.00	61164	99.84
634	49	0.08	59617	97.32	681	10	0.02	60820	99.28	754	4	0.01	61168	99.85
635	48	0.08	59665	97.40	682	9	0.01	60829	99.30	756	1	0.00	61169	99.85
636	38	0.06	59703	97.46	683	12	0.02	60841	99.32	758	3	0.00	61172	99.86
637	47	0.08	59750	97.54	684	11	0.02	60852	99.34	759	7	0.01	61179	99.87
638	43	0.07	59793	97.61	685	6	0.01	60858	99.35	761	16	0.03	61195	99.90
639	37	0.06	59830	97.67	686	9	0.01	60867	99.36	763	3	0.00	61198	99.90
640	40	0.07	59870	97.73	687	6	0.01	60873	99.37	767	1	0.00	61199	99.90
641	39	0.06	59909	97.80	688	8	0.01	60881	99.38	770	1	0.00	61200	99.90
642	33	0.05	59942	97.85	689	7	0.01	60888	99.39	780	59	0.10	61259	100
643	37	0.06	59979	97.91	690	4	0.01	60892	99.40					
644	30	0.05	60009	97.96	691	4	0.01	60896	99.41					
645	29	0.05	60038	98.01	692	5	0.01	60901	99.42					
646	32	0.05	60070	98.06	693	11	0.02	60912	99.43					
647	25	0.04	60095	98.10	694	6	0.01	60918	99.44					
648	32	0.05	60127	98.15	695	17	0.03	60935	99.47					
649	33	0.05	60160	98.21	696	5	0.01	60940	99.48					
650	34	0.06	60194	98.26	697	13	0.02	60953	99.50					
651	20	0.03	60214	98.29	698	1	0.00	60954	99.50					
652	34	0.06	60248	98.35	699	9	0.01	60963	99.52					
653	36	0.06	60284	98.41	700	4	0.01	60967	99.52					
654	24	0.04	60308	98.45	701	7	0.01	60974	99.53					
655	25	0.04	60333	98.49	702	20	0.03	60994	99.57					

**Table 169. Reading Grade 5 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
220	247	0.41	247	0.41	331	2	0.00	325	0.54	381	6	0.01	455	0.76
251	2	0.00	249	0.42	332	2	0.00	327	0.55	382	2	0.00	457	0.76
262	1	0.00	250	0.42	334	1	0.00	328	0.55	383	5	0.01	462	0.77
265	2	0.00	252	0.42	335	1	0.00	329	0.55	384	8	0.01	470	0.79
270	1	0.00	253	0.42	336	1	0.00	330	0.55	385	7	0.01	477	0.80
271	1	0.00	254	0.42	337	1	0.00	331	0.55	386	8	0.01	485	0.81
274	1	0.00	255	0.43	338	3	0.01	334	0.56	387	4	0.01	489	0.82
275	1	0.00	256	0.43	339	2	0.00	336	0.56	388	1	0.00	490	0.82
277	2	0.00	258	0.43	341	2	0.00	338	0.57	389	7	0.01	497	0.83
279	1	0.00	259	0.43	342	1	0.00	339	0.57	390	2	0.00	499	0.83
282	1	0.00	260	0.43	343	4	0.01	343	0.57	391	1	0.00	500	0.84
283	1	0.00	261	0.44	344	2	0.00	345	0.58	392	4	0.01	504	0.84
284	2	0.00	263	0.44	345	4	0.01	349	0.58	393	5	0.01	509	0.85
285	2	0.00	265	0.44	346	5	0.01	354	0.59	394	7	0.01	516	0.86
288	4	0.01	269	0.45	347	1	0.00	355	0.59	395	2	0.00	518	0.87
289	2	0.00	271	0.45	348	2	0.00	357	0.60	396	4	0.01	522	0.87
290	2	0.00	273	0.46	349	2	0.00	359	0.60	397	4	0.01	526	0.88
292	1	0.00	274	0.46	350	3	0.01	362	0.61	398	2	0.00	528	0.88
293	2	0.00	276	0.46	351	1	0.00	363	0.61	399	7	0.01	535	0.89
295	1	0.00	277	0.46	352	2	0.00	365	0.61	400	7	0.01	542	0.91
296	1	0.00	278	0.46	353	3	0.01	368	0.62	401	6	0.01	548	0.92
297	2	0.00	280	0.47	354	2	0.00	370	0.62	402	3	0.01	551	0.92
298	1	0.00	281	0.47	355	6	0.01	376	0.63	403	6	0.01	557	0.93
299	1	0.00	282	0.47	356	1	0.00	377	0.63	404	8	0.01	565	0.94
301	1	0.00	283	0.47	357	2	0.00	379	0.63	405	9	0.02	574	0.96
302	1	0.00	284	0.47	358	2	0.00	381	0.64	406	16	0.03	590	0.99
303	1	0.00	285	0.48	359	3	0.01	384	0.64	407	10	0.02	600	1.00
304	1	0.00	286	0.48	361	3	0.01	387	0.65	408	10	0.02	610	1.02
306	1	0.00	287	0.48	362	4	0.01	391	0.65	409	4	0.01	614	1.03
307	2	0.00	289	0.48	363	1	0.00	392	0.66	410	7	0.01	621	1.04
309	1	0.00	290	0.48	364	4	0.01	396	0.66	411	4	0.01	625	1.04
310	2	0.00	292	0.49	365	2	0.00	398	0.67	412	2	0.00	627	1.05
313	2	0.00	294	0.49	366	3	0.01	401	0.67	413	5	0.01	632	1.06
315	3	0.01	297	0.50	367	2	0.00	403	0.67	414	9	0.02	641	1.07
317	1	0.00	298	0.50	368	3	0.01	406	0.68	415	8	0.01	649	1.09
318	1	0.00	299	0.50	369	1	0.00	407	0.68	416	3	0.01	652	1.09
319	3	0.01	302	0.50	370	3	0.01	410	0.69	417	3	0.01	655	1.10
320	1	0.00	303	0.51	371	4	0.01	414	0.69	418	9	0.02	664	1.11
321	3	0.01	306	0.51	372	3	0.01	417	0.70	419	13	0.02	677	1.13
322	4	0.01	310	0.52	373	3	0.01	420	0.70	420	4	0.01	681	1.14
323	1	0.00	311	0.52	374	4	0.01	424	0.71	421	5	0.01	686	1.15
324	1	0.00	312	0.52	375	3	0.01	427	0.71	422	13	0.02	699	1.17
325	1	0.00	313	0.52	376	5	0.01	432	0.72	423	9	0.02	708	1.18
326	4	0.01	317	0.53	377	2	0.00	434	0.73	424	12	0.02	720	1.20
327	2	0.00	319	0.53	378	2	0.00	436	0.73	425	11	0.02	731	1.22
328	3	0.01	322	0.54	379	10	0.02	446	0.75	426	10	0.02	741	1.24
330	1	0.00	323	0.54	380	3	0.01	449	0.75	427	13	0.02	754	1.26

**Table 169. Reading Grade 5 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
428	8	0.01	762	1.27	475	35	0.06	1865	3.12	522	93	0.16	5004	8.37
429	14	0.02	776	1.30	476	38	0.06	1903	3.18	523	93	0.16	5097	8.52
430	19	0.03	795	1.33	477	44	0.07	1947	3.26	524	94	0.16	5191	8.68
431	9	0.02	804	1.34	478	45	0.08	1992	3.33	525	103	0.17	5294	8.85
432	13	0.02	817	1.37	479	35	0.06	2027	3.39	526	137	0.23	5431	9.08
433	19	0.03	836	1.40	480	53	0.09	2080	3.48	527	97	0.16	5528	9.24
434	14	0.02	850	1.42	481	45	0.08	2125	3.55	528	141	0.24	5669	9.48
435	16	0.03	866	1.45	482	39	0.07	2164	3.62	529	112	0.19	5781	9.67
436	15	0.03	881	1.47	483	48	0.08	2212	3.70	530	110	0.18	5891	9.85
437	17	0.03	898	1.50	484	54	0.09	2266	3.79	531	109	0.18	6000	10.03
438	14	0.02	912	1.52	485	54	0.09	2320	3.88	532	138	0.23	6138	10.26
439	4	0.01	916	1.53	486	46	0.08	2366	3.96	533	123	0.21	6261	10.47
440	15	0.03	931	1.56	487	40	0.07	2406	4.02	534	124	0.21	6385	10.68
441	12	0.02	943	1.58	488	59	0.10	2465	4.12	535	122	0.20	6507	10.88
442	12	0.02	955	1.60	489	52	0.09	2517	4.21	536	132	0.22	6639	11.10
443	31	0.05	986	1.65	490	49	0.08	2566	4.29	537	127	0.21	6766	11.31
444	17	0.03	1003	1.68	491	52	0.09	2618	4.38	538	136	0.23	6902	11.54
445	19	0.03	1022	1.71	492	53	0.09	2671	4.47	539	138	0.23	7040	11.77
446	23	0.04	1045	1.75	493	55	0.09	2726	4.56	540	138	0.23	7178	12.00
447	20	0.03	1065	1.78	494	51	0.09	2777	4.64	541	172	0.29	7350	12.29
448	16	0.03	1081	1.81	495	51	0.09	2828	4.73	542	170	0.28	7520	12.57
449	21	0.04	1102	1.84	496	53	0.09	2881	4.82	543	160	0.27	7680	12.84
450	18	0.03	1120	1.87	497	64	0.11	2945	4.92	544	162	0.27	7842	13.11
451	22	0.04	1142	1.91	498	63	0.11	3008	5.03	545	140	0.23	7982	13.35
452	22	0.04	1164	1.95	499	68	0.11	3076	5.14	546	172	0.29	8154	13.63
453	19	0.03	1183	1.98	500	75	0.13	3151	5.27	547	176	0.29	8330	13.93
454	22	0.04	1205	2.01	501	76	0.13	3227	5.40	548	175	0.29	8505	14.22
455	29	0.05	1234	2.06	502	64	0.11	3291	5.50	549	178	0.30	8683	14.52
456	24	0.04	1258	2.10	503	63	0.11	3354	5.61	550	183	0.31	8866	14.82
457	26	0.04	1284	2.15	504	74	0.12	3428	5.73	551	176	0.29	9042	15.12
458	28	0.05	1312	2.19	505	78	0.13	3506	5.86	552	176	0.29	9218	15.41
459	27	0.05	1339	2.24	506	64	0.11	3570	5.97	553	169	0.28	9387	15.69
460	31	0.05	1370	2.29	507	81	0.14	3651	6.10	554	218	0.36	9605	16.06
461	28	0.05	1398	2.34	508	75	0.13	3726	6.23	555	189	0.32	9794	16.38
462	22	0.04	1420	2.37	509	62	0.10	3788	6.33	556	189	0.32	9983	16.69
463	39	0.07	1459	2.44	510	83	0.14	3871	6.47	557	190	0.32	10173	17.01
464	23	0.04	1482	2.48	511	78	0.13	3949	6.60	558	199	0.33	10372	17.34
465	35	0.06	1517	2.54	512	96	0.16	4045	6.76	559	199	0.33	10571	17.67
466	40	0.07	1557	2.60	513	86	0.14	4131	6.91	560	201	0.34	10772	18.01
467	34	0.06	1591	2.66	514	88	0.15	4219	7.05	561	206	0.34	10978	18.36
468	34	0.06	1625	2.72	515	80	0.13	4299	7.19	562	213	0.36	11191	18.71
469	33	0.06	1658	2.77	516	99	0.17	4398	7.35	563	251	0.42	11442	19.13
470	30	0.05	1688	2.82	517	93	0.16	4491	7.51	564	230	0.38	11672	19.52
471	34	0.06	1722	2.88	518	85	0.14	4576	7.65	565	207	0.35	11879	19.86
472	40	0.07	1762	2.95	519	108	0.18	4684	7.83	566	244	0.41	12123	20.27
473	26	0.04	1788	2.99	520	117	0.20	4801	8.03	567	226	0.38	12349	20.65
474	42	0.07	1830	3.06	521	110	0.18	4911	8.21	568	249	0.42	12598	21.06

**Table 169. Reading Grade 5 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq	%	Cum. Freq.	Cum. %
569	223	0.37	12821	21.44	616	417	0.70	28572	47.77	663	294	0.49	47507	79.43
570	222	0.37	13043	21.81	617	414	0.69	28986	48.46	664	313	0.52	47820	79.95
571	219	0.37	13262	22.17	618	411	0.69	29397	49.15	665	313	0.52	48133	80.48
572	250	0.42	13512	22.59	619	397	0.66	29794	49.82	666	322	0.54	48455	81.02
573	270	0.45	13782	23.04	620	437	0.73	30231	50.55	667	309	0.52	48764	81.53
574	284	0.47	14066	23.52	621	437	0.73	30668	51.28	668	304	0.51	49068	82.04
575	270	0.45	14336	23.97	622	447	0.75	31115	52.02	669	301	0.50	49369	82.54
576	258	0.43	14594	24.40	623	456	0.76	31571	52.79	670	283	0.47	49652	83.02
577	278	0.46	14872	24.87	624	446	0.75	32017	53.53	671	324	0.54	49976	83.56
578	281	0.47	15153	25.34	625	414	0.69	32431	54.22	672	293	0.49	50269	84.05
579	296	0.49	15449	25.83	626	435	0.73	32866	54.95	673	302	0.50	50571	84.55
580	297	0.50	15746	26.33	627	437	0.73	33303	55.68	674	312	0.52	50883	85.08
581	304	0.51	16050	26.84	628	405	0.68	33708	56.36	675	259	0.43	51142	85.51
582	299	0.50	16349	27.34	629	411	0.69	34119	57.05	676	231	0.39	51373	85.90
583	327	0.55	16676	27.88	630	406	0.68	34525	57.73	677	255	0.43	51628	86.32
584	308	0.51	16984	28.40	631	426	0.71	34951	58.44	678	257	0.43	51885	86.75
585	291	0.49	17275	28.88	632	441	0.74	35392	59.18	679	267	0.45	52152	87.20
586	307	0.51	17582	29.40	633	461	0.77	35853	59.95	680	251	0.42	52403	87.62
587	314	0.53	17896	29.92	634	447	0.75	36300	60.69	681	220	0.37	52623	87.99
588	332	0.56	18228	30.48	635	433	0.72	36733	61.42	682	239	0.40	52862	88.38
589	324	0.54	18552	31.02	636	390	0.65	37123	62.07	683	225	0.38	53087	88.76
590	322	0.54	18874	31.56	637	402	0.67	37525	62.74	684	223	0.37	53310	89.13
591	322	0.54	19196	32.10	638	412	0.69	37937	63.43	685	203	0.34	53513	89.47
592	343	0.57	19539	32.67	639	459	0.77	38396	64.20	686	192	0.32	53705	89.79
593	302	0.50	19841	33.17	640	426	0.71	38822	64.91	687	219	0.37	53924	90.16
594	316	0.53	20157	33.70	641	406	0.68	39228	65.59	688	182	0.30	54106	90.46
595	357	0.60	20514	34.30	642	394	0.66	39622	66.25	689	193	0.32	54299	90.79
596	354	0.59	20868	34.89	643	420	0.70	40042	66.95	690	198	0.33	54497	91.12
597	361	0.60	21229	35.49	644	386	0.65	40428	67.60	691	189	0.32	54686	91.43
598	421	0.70	21650	36.20	645	418	0.70	40846	68.29	692	193	0.32	54879	91.76
599	373	0.62	22023	36.82	646	420	0.70	41266	69.00	693	168	0.28	55047	92.04
600	366	0.61	22389	37.43	647	393	0.66	41659	69.65	694	168	0.28	55215	92.32
601	329	0.55	22718	37.98	648	390	0.65	42049	70.31	695	189	0.32	55404	92.63
602	362	0.61	23080	38.59	649	382	0.64	42431	70.94	696	178	0.30	55582	92.93
603	388	0.65	23468	39.24	650	393	0.66	42824	71.60	697	172	0.29	55754	93.22
604	377	0.63	23845	39.87	651	392	0.66	43216	72.26	698	143	0.24	55897	93.46
605	354	0.59	24199	40.46	652	391	0.65	43607	72.91	699	133	0.22	56030	93.68
606	418	0.70	24617	41.16	653	362	0.61	43969	73.52	700	150	0.25	56180	93.93
607	399	0.67	25016	41.83	654	377	0.63	44346	74.15	701	140	0.23	56320	94.17
608	390	0.65	25406	42.48	655	355	0.59	44701	74.74	702	124	0.21	56444	94.37
609	384	0.64	25790	43.12	656	363	0.61	45064	75.35	703	106	0.18	56550	94.55
610	367	0.61	26157	43.73	657	356	0.60	45420	75.94	704	119	0.20	56669	94.75
611	381	0.64	26538	44.37	658	392	0.66	45812	76.60	705	107	0.18	56776	94.93
612	393	0.66	26931	45.03	659	353	0.59	46165	77.19	706	117	0.20	56893	95.12
613	417	0.70	27348	45.73	660	355	0.59	46520	77.78	707	142	0.24	57035	95.36
614	396	0.66	27744	46.39	661	338	0.57	46858	78.35	708	96	0.16	57131	95.52
615	411	0.69	28155	47.07	662	355	0.59	47213	78.94	709	94	0.16	57225	95.68

**Table 169. Reading Grade 5 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
710	102	0.17	57327	95.85	757	13	0.02	59560	99.58	813	3	0.01	59797	99.98
711	102	0.17	57429	96.02	758	14	0.02	59574	99.61	816	1	0.00	59798	99.98
712	102	0.17	57531	96.19	759	12	0.02	59586	99.63	819	1	0.00	59799	99.98
713	86	0.14	57617	96.33	760	11	0.02	59597	99.65	822	2	0.00	59801	99.99
714	94	0.16	57711	96.49	761	13	0.02	59610	99.67	823	2	0.00	59803	99.99
715	87	0.15	57798	96.64	762	6	0.01	59616	99.68	824	1	0.00	59804	99.99
716	95	0.16	57893	96.80	763	16	0.03	59632	99.70	827	1	0.00	59805	99.99
717	91	0.15	57984	96.95	764	11	0.02	59643	99.72	835	1	0.00	59806	99.99
718	74	0.12	58058	97.07	765	9	0.02	59652	99.74	841	1	0.00	59807	100
719	85	0.14	58143	97.21	766	7	0.01	59659	99.75	844	1	0.00	59808	100
720	83	0.14	58226	97.35	767	4	0.01	59663	99.76	855	1	0.00	59809	100
721	68	0.11	58294	97.47	768	11	0.02	59674	99.77					
722	73	0.12	58367	97.59	769	10	0.02	59684	99.79					
723	71	0.12	58438	97.71	770	4	0.01	59688	99.80					
724	67	0.11	58505	97.82	771	4	0.01	59692	99.80					
725	58	0.10	58563	97.92	772	5	0.01	59697	99.81					
726	54	0.09	58617	98.01	773	5	0.01	59702	99.82					
727	48	0.08	58665	98.09	774	2	0.00	59704	99.82					
728	63	0.11	58728	98.19	775	9	0.02	59713	99.84					
729	57	0.10	58785	98.29	776	5	0.01	59718	99.85					
730	44	0.07	58829	98.36	777	7	0.01	59725	99.86					
731	42	0.07	58871	98.43	778	5	0.01	59730	99.87					
732	47	0.08	58918	98.51	779	8	0.01	59738	99.88					
733	53	0.09	58971	98.60	780	6	0.01	59744	99.89					
734	52	0.09	59023	98.69	781	6	0.01	59750	99.90					
735	51	0.09	59074	98.77	782	3	0.01	59753	99.91					
736	41	0.07	59115	98.84	783	4	0.01	59757	99.91					
737	31	0.05	59146	98.89	784	2	0.00	59759	99.92					
738	41	0.07	59187	98.96	785	1	0.00	59760	99.92					
739	31	0.05	59218	99.01	786	2	0.00	59762	99.92					
740	37	0.06	59255	99.07	787	1	0.00	59763	99.92					
741	25	0.04	59280	99.12	788	1	0.00	59764	99.92					
742	29	0.05	59309	99.16	789	3	0.01	59767	99.93					
743	33	0.06	59342	99.22	790	2	0.00	59769	99.93					
744	23	0.04	59365	99.26	791	2	0.00	59771	99.94					
745	18	0.03	59383	99.29	792	4	0.01	59775	99.94					
746	28	0.05	59411	99.33	793	3	0.01	59778	99.95					
747	17	0.03	59428	99.36	795	1	0.00	59779	99.95					
748	19	0.03	59447	99.39	796	3	0.01	59782	99.95					
749	9	0.02	59456	99.41	798	3	0.01	59785	99.96					
750	11	0.02	59467	99.43	799	1	0.00	59786	99.96					
751	20	0.03	59487	99.46	800	2	0.00	59788	99.96					
752	12	0.02	59499	99.48	802	1	0.00	59789	99.97					
753	15	0.03	59514	99.51	803	1	0.00	59790	99.97					
754	9	0.02	59523	99.52	806	1	0.00	59791	99.97					
755	10	0.02	59533	99.54	807	1	0.00	59792	99.97					
756	14	0.02	59547	99.56	809	2	0.00	59794	99.97					

**Table 170. Writing Grade 5 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
220	13	0.02	13	0.02	309	3	0.01	78	0.13	357	14	0.02	327	0.55
222	1	0.00	14	0.02	310	2	0.00	80	0.13	358	13	0.02	340	0.57
223	1	0.00	15	0.03	311	2	0.00	82	0.14	359	9	0.02	349	0.58
226	1	0.00	16	0.03	312	3	0.01	85	0.14	360	14	0.02	363	0.61
228	1	0.00	17	0.03	313	1	0.00	86	0.14	361	16	0.03	379	0.63
229	1	0.00	18	0.03	314	2	0.00	88	0.15	362	13	0.02	392	0.66
230	1	0.00	19	0.03	315	1	0.00	89	0.15	363	13	0.02	405	0.68
231	1	0.00	20	0.03	316	2	0.00	91	0.15	364	17	0.03	422	0.71
233	1	0.00	21	0.04	317	5	0.01	96	0.16	365	10	0.02	432	0.72
238	1	0.00	22	0.04	318	1	0.00	97	0.16	366	20	0.03	452	0.76
241	1	0.00	23	0.04	319	5	0.01	102	0.17	367	26	0.04	478	0.80
242	1	0.00	24	0.04	320	4	0.01	106	0.18	368	20	0.03	498	0.83
243	1	0.00	25	0.04	321	2	0.00	108	0.18	369	21	0.04	519	0.87
244	1	0.00	26	0.04	322	9	0.02	117	0.20	370	19	0.03	538	0.90
247	1	0.00	27	0.05	324	6	0.01	123	0.21	371	25	0.04	563	0.94
256	1	0.00	28	0.05	325	2	0.00	125	0.21	372	23	0.04	586	0.98
261	1	0.00	29	0.05	326	2	0.00	127	0.21	373	20	0.03	606	1.01
262	1	0.00	30	0.05	327	1	0.00	128	0.21	374	28	0.05	634	1.06
263	1	0.00	31	0.05	328	4	0.01	132	0.22	375	31	0.05	665	1.11
266	1	0.00	32	0.05	329	5	0.01	137	0.23	376	25	0.04	690	1.15
270	1	0.00	33	0.06	330	1	0.00	138	0.23	377	23	0.04	713	1.19
272	1	0.00	34	0.06	331	5	0.01	143	0.24	378	33	0.06	746	1.25
273	1	0.00	35	0.06	332	4	0.01	147	0.25	379	32	0.05	778	1.30
276	1	0.00	36	0.06	333	1	0.00	148	0.25	380	34	0.06	812	1.36
277	1	0.00	37	0.06	334	6	0.01	154	0.26	381	27	0.05	839	1.40
279	1	0.00	38	0.06	335	5	0.01	159	0.27	382	30	0.05	869	1.45
280	1	0.00	39	0.07	336	2	0.00	161	0.27	383	29	0.05	898	1.50
282	1	0.00	40	0.07	337	6	0.01	167	0.28	384	40	0.07	938	1.57
284	1	0.00	41	0.07	338	6	0.01	173	0.29	385	32	0.05	970	1.62
285	1	0.00	42	0.07	339	5	0.01	178	0.30	386	25	0.04	995	1.67
286	1	0.00	43	0.07	340	5	0.01	183	0.31	387	40	0.07	1035	1.73
288	5	0.01	48	0.08	341	11	0.02	194	0.32	388	39	0.07	1074	1.80
289	1	0.00	49	0.08	342	3	0.01	197	0.33	389	35	0.06	1109	1.86
290	2	0.00	51	0.09	343	6	0.01	203	0.34	390	48	0.08	1157	1.94
292	2	0.00	53	0.09	344	10	0.02	213	0.36	391	52	0.09	1209	2.02
293	1	0.00	54	0.09	345	7	0.01	220	0.37	392	65	0.11	1274	2.13
294	2	0.00	56	0.09	346	6	0.01	226	0.38	393	62	0.10	1336	2.24
296	2	0.00	58	0.10	347	5	0.01	231	0.39	394	44	0.07	1380	2.31
297	2	0.00	60	0.10	348	7	0.01	238	0.40	395	59	0.10	1439	2.41
299	2	0.00	62	0.10	349	4	0.01	242	0.41	396	58	0.10	1497	2.51
300	2	0.00	64	0.11	350	8	0.01	250	0.42	397	63	0.11	1560	2.61
303	1	0.00	65	0.11	351	11	0.02	261	0.44	398	59	0.10	1619	2.71
304	1	0.00	66	0.11	352	7	0.01	268	0.45	399	61	0.10	1680	2.81
305	3	0.01	69	0.12	353	11	0.02	279	0.47	400	57	0.10	1737	2.91
306	1	0.00	70	0.12	354	13	0.02	292	0.49	401	63	0.11	1800	3.01
307	3	0.01	73	0.12	355	12	0.02	304	0.51	402	61	0.10	1861	3.11
308	2	0.00	75	0.13	356	9	0.02	313	0.52	403	63	0.11	1924	3.22



**Table 170. Writing Grade 5 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
404	76	0.13	2000	3.35	451	245	0.41	8938	14.96	498	406	0.68	25580	42.82
405	81	0.14	2081	3.48	452	250	0.42	9188	15.38	499	448	0.75	26028	43.57
406	68	0.11	2149	3.60	453	275	0.46	9463	15.84	500	443	0.74	26471	44.31
407	89	0.15	2238	3.75	454	263	0.44	9726	16.28	501	432	0.72	26903	45.03
408	85	0.14	2323	3.89	455	244	0.41	9970	16.69	502	479	0.80	27382	45.83
409	71	0.12	2394	4.01	456	254	0.43	10224	17.11	503	496	0.83	27878	46.66
410	97	0.16	2491	4.17	457	245	0.41	10469	17.52	504	437	0.73	28315	47.39
411	93	0.16	2584	4.33	458	282	0.47	10751	17.99	505	437	0.73	28752	48.12
412	72	0.12	2656	4.45	459	275	0.46	11026	18.46	506	448	0.75	29200	48.87
413	78	0.13	2734	4.58	460	286	0.48	11312	18.93	507	447	0.75	29647	49.62
414	104	0.17	2838	4.75	461	282	0.47	11594	19.41	508	481	0.81	30128	50.43
415	92	0.15	2930	4.90	462	321	0.54	11915	19.94	509	500	0.84	30628	51.26
416	105	0.18	3035	5.08	463	326	0.55	12241	20.49	510	460	0.77	31088	52.03
417	113	0.19	3148	5.27	464	289	0.48	12530	20.97	511	406	0.68	31494	52.71
418	107	0.18	3255	5.45	465	299	0.50	12829	21.47	512	456	0.76	31950	53.48
419	105	0.18	3360	5.62	466	309	0.52	13138	21.99	513	464	0.78	32414	54.25
420	134	0.22	3494	5.85	467	323	0.54	13461	22.53	514	505	0.85	32919	55.10
421	112	0.19	3606	6.04	468	319	0.53	13780	23.06	515	469	0.79	33388	55.88
422	126	0.21	3732	6.25	469	352	0.59	14132	23.65	516	463	0.77	33851	56.66
423	130	0.22	3862	6.46	470	324	0.54	14456	24.20	517	441	0.74	34292	57.40
424	135	0.23	3997	6.69	471	353	0.59	14809	24.79	518	464	0.78	34756	58.17
425	127	0.21	4124	6.90	472	358	0.60	15167	25.39	519	468	0.78	35224	58.96
426	137	0.23	4261	7.13	473	341	0.57	15508	25.96	520	466	0.78	35690	59.74
427	149	0.25	4410	7.38	474	368	0.62	15876	26.57	521	450	0.75	36140	60.49
428	130	0.22	4540	7.60	475	351	0.59	16227	27.16	522	464	0.78	36604	61.27
429	146	0.24	4686	7.84	476	369	0.62	16596	27.78	523	419	0.70	37023	61.97
430	151	0.25	4837	8.10	477	376	0.63	16972	28.41	524	450	0.75	37473	62.72
431	165	0.28	5002	8.37	478	367	0.61	17339	29.02	525	467	0.78	37940	63.50
432	170	0.28	5172	8.66	479	392	0.66	17731	29.68	526	430	0.72	38370	64.22
433	162	0.27	5334	8.93	480	399	0.67	18130	30.35	527	425	0.71	38795	64.93
434	162	0.27	5496	9.20	481	371	0.62	18501	30.97	528	411	0.69	39206	65.62
435	158	0.26	5654	9.46	482	372	0.62	18873	31.59	529	410	0.69	39616	66.31
436	172	0.29	5826	9.75	483	399	0.67	19272	32.26	530	418	0.70	40034	67.01
437	175	0.29	6001	10.04	484	391	0.65	19663	32.91	531	418	0.70	40452	67.71
438	167	0.28	6168	10.32	485	436	0.73	20099	33.64	532	422	0.71	40874	68.41
439	199	0.33	6367	10.66	486	411	0.69	20510	34.33	533	404	0.68	41278	69.09
440	172	0.29	6539	10.94	487	401	0.67	20911	35.00	534	402	0.67	41680	69.76
441	197	0.33	6736	11.27	488	387	0.65	21298	35.65	535	451	0.75	42131	70.52
442	199	0.33	6935	11.61	489	407	0.68	21705	36.33	536	451	0.75	42582	71.27
443	222	0.37	7157	11.98	490	414	0.69	22119	37.02	537	397	0.66	42979	71.94
444	209	0.35	7366	12.33	491	449	0.75	22568	37.77	538	379	0.63	43358	72.57
445	204	0.34	7570	12.67	492	404	0.68	22972	38.45	539	403	0.67	43761	73.25
446	215	0.36	7785	13.03	493	415	0.69	23387	39.14	540	360	0.60	44121	73.85
447	213	0.36	7998	13.39	494	452	0.76	23839	39.90	541	404	0.68	44525	74.53
448	206	0.34	8204	13.73	495	456	0.76	24295	40.66	542	400	0.67	44925	75.19
449	237	0.40	8441	14.13	496	436	0.73	24731	41.39	543	362	0.61	45287	75.80
450	252	0.42	8693	14.55	497	443	0.74	25174	42.14	544	336	0.56	45623	76.36

**Table 170. Writing Grade 5 Scale Score Distribution (continued)**

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
545	362	0.61	45985	76.97	592	95	0.16	56487	94.55	639	22	0.04	59117	98.95
546	348	0.58	46333	77.55	593	125	0.21	56612	94.76	640	22	0.04	59139	98.99
547	326	0.55	46659	78.10	594	101	0.17	56713	94.93	641	24	0.04	59163	99.03
548	314	0.53	46973	78.62	595	88	0.15	56801	95.07	642	36	0.06	59199	99.09
549	319	0.53	47292	79.16	596	88	0.15	56889	95.22	643	13	0.02	59212	99.11
550	327	0.55	47619	79.70	597	100	0.17	56989	95.39	644	7	0.01	59219	99.12
551	314	0.53	47933	80.23	598	114	0.19	57103	95.58	645	9	0.02	59228	99.13
552	334	0.56	48267	80.79	599	102	0.17	57205	95.75	646	15	0.03	59243	99.16
553	304	0.51	48571	81.30	600	88	0.15	57293	95.90	647	8	0.01	59251	99.17
554	281	0.47	48852	81.77	601	132	0.22	57425	96.12	648	14	0.02	59265	99.20
555	301	0.50	49153	82.27	602	73	0.12	57498	96.24	649	17	0.03	59282	99.23
556	292	0.49	49445	82.76	603	83	0.14	57581	96.38	650	14	0.02	59296	99.25
557	282	0.47	49727	83.23	604	74	0.12	57655	96.50	651	12	0.02	59308	99.27
558	322	0.54	50049	83.77	605	61	0.10	57716	96.60	652	19	0.03	59327	99.30
559	254	0.43	50303	84.20	606	56	0.09	57772	96.70	653	7	0.01	59334	99.31
560	260	0.44	50563	84.63	607	65	0.11	57837	96.81	654	24	0.04	59358	99.35
561	249	0.42	50812	85.05	608	55	0.09	57892	96.90	655	4	0.01	59362	99.36
562	267	0.45	51079	85.50	609	49	0.08	57941	96.98	656	43	0.07	59405	99.43
563	275	0.46	51354	85.96	610	50	0.08	57991	97.06	657	6	0.01	59411	99.44
564	262	0.44	51616	86.39	611	45	0.08	58036	97.14	658	1	0.00	59412	99.44
565	246	0.41	51862	86.81	612	107	0.18	58143	97.32	659	13	0.02	59425	99.46
566	248	0.42	52110	87.22	613	58	0.10	58201	97.42	660	8	0.01	59433	99.48
567	255	0.43	52365	87.65	614	56	0.09	58257	97.51	661	18	0.03	59451	99.51
568	234	0.39	52599	88.04	615	42	0.07	58299	97.58	662	4	0.01	59455	99.51
569	200	0.33	52799	88.37	616	66	0.11	58365	97.69	663	9	0.02	59464	99.53
570	228	0.38	53027	88.76	617	34	0.06	58399	97.75	664	3	0.01	59467	99.53
571	213	0.36	53240	89.11	618	31	0.05	58430	97.80	665	3	0.01	59470	99.54
572	187	0.31	53427	89.43	619	28	0.05	58458	97.85	666	10	0.02	59480	99.56
573	190	0.32	53617	89.74	620	43	0.07	58501	97.92	667	3	0.01	59483	99.56
574	203	0.34	53820	90.08	621	36	0.06	58537	97.98	668	4	0.01	59487	99.57
575	182	0.30	54002	90.39	622	51	0.09	58588	98.06	669	5	0.01	59492	99.58
576	188	0.31	54190	90.70	623	30	0.05	58618	98.11	670	12	0.02	59504	99.60
577	183	0.31	54373	91.01	624	39	0.07	58657	98.18	671	6	0.01	59510	99.61
578	182	0.30	54555	91.31	625	58	0.10	58715	98.28	672	6	0.01	59516	99.62
579	146	0.24	54701	91.56	626	29	0.05	58744	98.32	673	6	0.01	59522	99.63
580	156	0.26	54857	91.82	627	45	0.08	58789	98.40	674	9	0.02	59531	99.64
581	148	0.25	55005	92.07	628	31	0.05	58820	98.45	675	4	0.01	59535	99.65
582	177	0.30	55182	92.36	629	35	0.06	58855	98.51	676	3	0.01	59538	99.65
583	160	0.27	55342	92.63	630	33	0.06	58888	98.57	677	10	0.02	59548	99.67
584	147	0.25	55489	92.88	631	29	0.05	58917	98.61	678	4	0.01	59552	99.68
585	136	0.23	55625	93.10	632	21	0.04	58938	98.65	679	1	0.00	59553	99.68
586	134	0.22	55759	93.33	633	31	0.05	58969	98.70	680	36	0.06	59589	99.74
587	136	0.23	55895	93.56	634	27	0.05	58996	98.75	681	10	0.02	59599	99.76
588	130	0.22	56025	93.77	635	16	0.03	59012	98.77	682	1	0.00	59600	99.76
589	126	0.21	56151	93.98	636	38	0.06	59050	98.84	684	18	0.03	59618	99.79
590	130	0.22	56281	94.20	637	20	0.03	59070	98.87	685	2	0.00	59620	99.79
591	111	0.19	56392	94.39	638	25	0.04	59095	98.91	686	2	0.00	59622	99.79

**Table 170. Writing Grade 5 Scale Score Distribution (continued)**

<b>SS</b>	<b>Freq</b>	<b>%</b>	<b>Cum. Freq.</b>	<b>Cum. %</b>
687	4	0.01	59626	99.80
688	4	0.01	59630	99.81
690	4	0.01	59634	99.81
691	1	0.00	59635	99.82
692	1	0.00	59636	99.82
694	4	0.01	59640	99.82
695	3	0.01	59643	99.83
699	4	0.01	59647	99.84
700	1	0.00	59648	99.84
701	1	0.00	59649	99.84
704	2	0.00	59651	99.84
707	2	0.00	59653	99.85
708	1	0.00	59654	99.85
709	1	0.00	59655	99.85
710	2	0.00	59657	99.85
711	3	0.01	59660	99.86
713	3	0.01	59663	99.86
715	1	0.00	59664	99.86
718	13	0.02	59677	99.89
719	14	0.02	59691	99.91
724	17	0.03	59708	99.94
726	7	0.01	59715	99.95
733	6	0.01	59721	99.96
747	2	0.00	59723	99.96
780	22	0.04	59745	100

**Table 171. Mathematics Grade 5 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
220	48	0.08	48	0.08	277	3	0.01	146	0.24	325	9	0.02	461	0.77
221	4	0.01	52	0.09	278	3	0.01	149	0.25	326	13	0.02	474	0.79
224	1	0.00	53	0.09	279	6	0.01	155	0.26	327	14	0.02	488	0.82
226	1	0.00	54	0.09	280	1	0.00	156	0.26	328	14	0.02	502	0.84
227	1	0.00	55	0.09	281	3	0.01	159	0.27	329	16	0.03	518	0.87
228	1	0.00	56	0.09	282	4	0.01	163	0.27	330	11	0.02	529	0.88
229	1	0.00	57	0.10	283	1	0.00	164	0.27	331	11	0.02	540	0.90
230	3	0.01	60	0.10	284	4	0.01	168	0.28	332	16	0.03	556	0.93
232	1	0.00	61	0.10	285	11	0.02	179	0.30	333	18	0.03	574	0.96
234	2	0.00	63	0.11	286	3	0.01	182	0.30	334	13	0.02	587	0.98
235	2	0.00	65	0.11	288	1	0.00	183	0.31	335	13	0.02	600	1.00
236	1	0.00	66	0.11	289	3	0.01	186	0.31	336	22	0.04	622	1.04
237	2	0.00	68	0.11	290	4	0.01	190	0.32	337	12	0.02	634	1.06
238	1	0.00	69	0.12	291	5	0.01	195	0.33	338	11	0.02	645	1.08
239	2	0.00	71	0.12	292	3	0.01	198	0.33	339	19	0.03	664	1.11
241	2	0.00	73	0.12	293	2	0.00	200	0.33	340	19	0.03	683	1.14
242	2	0.00	75	0.13	294	4	0.01	204	0.34	341	27	0.05	710	1.19
243	1	0.00	76	0.13	295	4	0.01	208	0.35	342	20	0.03	730	1.22
244	2	0.00	78	0.13	296	6	0.01	214	0.36	343	19	0.03	749	1.25
245	1	0.00	79	0.13	297	7	0.01	221	0.37	344	14	0.02	763	1.27
246	1	0.00	80	0.13	298	4	0.01	225	0.38	345	13	0.02	776	1.30
247	1	0.00	81	0.14	299	2	0.00	227	0.38	346	29	0.05	805	1.34
248	1	0.00	82	0.14	300	4	0.01	231	0.39	347	23	0.04	828	1.38
250	1	0.00	83	0.14	301	7	0.01	238	0.40	348	27	0.05	855	1.43
251	2	0.00	85	0.14	302	7	0.01	245	0.41	349	25	0.04	880	1.47
252	2	0.00	87	0.15	303	9	0.02	254	0.42	350	29	0.05	909	1.52
254	2	0.00	89	0.15	304	5	0.01	259	0.43	351	17	0.03	926	1.55
255	1	0.00	90	0.15	305	11	0.02	270	0.45	352	25	0.04	951	1.59
256	3	0.01	93	0.16	306	10	0.02	280	0.47	353	26	0.04	977	1.63
257	2	0.00	95	0.16	307	9	0.02	289	0.48	354	20	0.03	997	1.67
258	3	0.01	98	0.16	308	7	0.01	296	0.49	355	27	0.05	1024	1.71
259	1	0.00	99	0.17	309	13	0.02	309	0.52	356	37	0.06	1061	1.77
260	4	0.01	103	0.17	310	13	0.02	322	0.54	357	25	0.04	1086	1.81
261	6	0.01	109	0.18	311	7	0.01	329	0.55	358	27	0.05	1113	1.86
262	5	0.01	114	0.19	312	8	0.01	337	0.56	359	27	0.05	1140	1.90
263	4	0.01	118	0.20	313	13	0.02	350	0.58	360	29	0.05	1169	1.95
264	1	0.00	119	0.20	314	8	0.01	358	0.60	361	32	0.05	1201	2.01
265	2	0.00	121	0.20	315	9	0.02	367	0.61	362	23	0.04	1224	2.04
266	1	0.00	122	0.20	316	8	0.01	375	0.63	363	37	0.06	1261	2.11
268	1	0.00	123	0.21	317	12	0.02	387	0.65	364	41	0.07	1302	2.17
269	4	0.01	127	0.21	318	3	0.01	390	0.65	365	36	0.06	1338	2.24
270	1	0.00	128	0.21	319	10	0.02	400	0.67	366	34	0.06	1372	2.29
272	4	0.01	132	0.22	320	7	0.01	407	0.68	367	44	0.07	1416	2.37
273	4	0.01	136	0.23	321	13	0.02	420	0.70	368	39	0.07	1455	2.43
274	1	0.00	137	0.23	322	11	0.02	431	0.72	369	39	0.07	1494	2.50
275	5	0.01	142	0.24	323	13	0.02	444	0.74	370	35	0.06	1529	2.55
276	1	0.00	143	0.24	324	8	0.01	452	0.76	371	31	0.05	1560	2.61

**Table 171. Mathematics Grade 5 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
372	42	0.07	1602	2.68	419	104	0.17	5011	8.37	466	221	0.37	13122	21.92
373	49	0.08	1651	2.76	420	133	0.22	5144	8.59	467	244	0.41	13366	22.33
374	41	0.07	1692	2.83	421	126	0.21	5270	8.80	468	234	0.39	13600	22.72
375	40	0.07	1732	2.89	422	116	0.19	5386	9.00	469	254	0.42	13854	23.14
376	61	0.10	1793	3.00	423	120	0.20	5506	9.20	470	237	0.40	14091	23.54
377	48	0.08	1841	3.08	424	122	0.20	5628	9.40	471	247	0.41	14338	23.95
378	41	0.07	1882	3.14	425	131	0.22	5759	9.62	472	256	0.43	14594	24.38
379	38	0.06	1920	3.21	426	112	0.19	5871	9.81	473	281	0.47	14875	24.85
380	52	0.09	1972	3.29	427	118	0.20	5989	10.00	474	261	0.44	15136	25.28
381	57	0.10	2029	3.39	428	143	0.24	6132	10.24	475	242	0.40	15378	25.69
382	58	0.10	2087	3.49	429	136	0.23	6268	10.47	476	245	0.41	15623	26.10
383	52	0.09	2139	3.57	430	140	0.23	6408	10.70	477	246	0.41	15869	26.51
384	49	0.08	2188	3.66	431	138	0.23	6546	10.93	478	272	0.45	16141	26.96
385	43	0.07	2231	3.73	432	144	0.24	6690	11.18	479	242	0.40	16383	27.37
386	60	0.10	2291	3.83	433	147	0.25	6837	11.42	480	263	0.44	16646	27.81
387	50	0.08	2341	3.91	434	129	0.22	6966	11.64	481	319	0.53	16965	28.34
388	49	0.08	2390	3.99	435	159	0.27	7125	11.90	482	271	0.45	17236	28.79
389	70	0.12	2460	4.11	436	147	0.25	7272	12.15	483	299	0.50	17535	29.29
390	67	0.11	2527	4.22	437	157	0.26	7429	12.41	484	278	0.46	17813	29.76
391	64	0.11	2591	4.33	438	171	0.29	7600	12.70	485	242	0.40	18055	30.16
392	64	0.11	2655	4.44	439	183	0.31	7783	13.00	486	298	0.50	18353	30.66
393	78	0.13	2733	4.57	440	154	0.26	7937	13.26	487	267	0.45	18620	31.10
394	59	0.10	2792	4.66	441	165	0.28	8102	13.53	488	296	0.49	18916	31.60
395	50	0.08	2842	4.75	442	171	0.29	8273	13.82	489	284	0.47	19200	32.07
396	81	0.14	2923	4.88	443	176	0.29	8449	14.11	490	301	0.50	19501	32.58
397	67	0.11	2990	4.99	444	187	0.31	8636	14.43	491	292	0.49	19793	33.06
398	67	0.11	3057	5.11	445	185	0.31	8821	14.74	492	296	0.49	20089	33.56
399	85	0.14	3142	5.25	446	174	0.29	8995	15.03	493	298	0.50	20387	34.06
400	77	0.13	3219	5.38	447	174	0.29	9169	15.32	494	297	0.50	20684	34.55
401	83	0.14	3302	5.52	448	184	0.31	9353	15.62	495	277	0.46	20961	35.01
402	111	0.19	3413	5.70	449	190	0.32	9543	15.94	496	318	0.53	21279	35.55
403	68	0.11	3481	5.81	450	185	0.31	9728	16.25	497	286	0.48	21565	36.02
404	86	0.14	3567	5.96	451	204	0.34	9932	16.59	498	304	0.51	21869	36.53
405	81	0.14	3648	6.09	452	187	0.31	10119	16.90	499	300	0.50	22169	37.03
406	82	0.14	3730	6.23	453	167	0.28	10286	17.18	500	298	0.50	22467	37.53
407	79	0.13	3809	6.36	454	211	0.35	10497	17.54	501	303	0.51	22770	38.04
408	83	0.14	3892	6.50	455	194	0.32	10691	17.86	502	351	0.59	23121	38.62
409	85	0.14	3977	6.64	456	195	0.33	10886	18.18	503	310	0.52	23431	39.14
410	92	0.15	4069	6.80	457	206	0.34	11092	18.53	504	323	0.54	23754	39.68
411	91	0.15	4160	6.95	458	214	0.36	11306	18.89	505	323	0.54	24077	40.22
412	105	0.18	4265	7.12	459	237	0.40	11543	19.28	506	307	0.51	24384	40.73
413	106	0.18	4371	7.30	460	218	0.36	11761	19.65	507	329	0.55	24713	41.28
414	93	0.16	4464	7.46	461	250	0.42	12011	20.06	508	304	0.51	25017	41.79
415	88	0.15	4552	7.60	462	219	0.37	12230	20.43	509	269	0.45	25286	42.24
416	109	0.18	4661	7.79	463	210	0.35	12440	20.78	510	311	0.52	25597	42.76
417	110	0.18	4771	7.97	464	222	0.37	12662	21.15	511	318	0.53	25915	43.29
418	136	0.23	4907	8.20	465	239	0.40	12901	21.55	512	352	0.59	26267	43.88

**Table 171. Mathematics Grade 5 Scale Score Distribution (continued)**

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
513	341	0.57	26608	44.45	560	317	0.53	42499	70.99	607	192	0.32	53930	90.09
514	365	0.61	26973	45.06	561	299	0.50	42798	71.49	608	145	0.24	54075	90.33
515	355	0.59	27328	45.65	562	307	0.51	43105	72.01	609	178	0.30	54253	90.63
516	334	0.56	27662	46.21	563	323	0.54	43428	72.55	610	154	0.26	54407	90.89
517	354	0.59	28016	46.80	564	286	0.48	43714	73.02	611	164	0.27	54571	91.16
518	334	0.56	28350	47.36	565	294	0.49	44008	73.51	612	136	0.23	54707	91.39
519	330	0.55	28680	47.91	566	285	0.48	44293	73.99	613	136	0.23	54843	91.61
520	341	0.57	29021	48.48	567	320	0.53	44613	74.53	614	138	0.23	54981	91.84
521	331	0.55	29352	49.03	568	271	0.45	44884	74.98	615	152	0.25	55133	92.10
522	340	0.57	29692	49.60	569	276	0.46	45160	75.44	616	142	0.24	55275	92.34
523	323	0.54	30015	50.14	570	284	0.47	45444	75.91	617	128	0.21	55403	92.55
524	326	0.54	30341	50.68	571	296	0.49	45740	76.41	618	134	0.22	55537	92.77
525	339	0.57	30680	51.25	572	272	0.45	46012	76.86	619	122	0.20	55659	92.98
526	342	0.57	31022	51.82	573	296	0.49	46308	77.36	620	154	0.26	55813	93.23
527	333	0.56	31355	52.38	574	269	0.45	46577	77.81	621	118	0.20	55931	93.43
528	361	0.60	31716	52.98	575	284	0.47	46861	78.28	622	109	0.18	56040	93.61
529	371	0.62	32087	53.60	576	241	0.40	47102	78.68	623	96	0.16	56136	93.77
530	341	0.57	32428	54.17	577	286	0.48	47388	79.16	624	105	0.18	56241	93.95
531	342	0.57	32770	54.74	578	259	0.43	47647	79.59	625	89	0.15	56330	94.10
532	336	0.56	33106	55.30	579	286	0.48	47933	80.07	626	104	0.17	56434	94.27
533	344	0.57	33450	55.88	580	241	0.40	48174	80.47	627	108	0.18	56542	94.45
534	322	0.54	33772	56.42	581	260	0.43	48434	80.91	628	101	0.17	56643	94.62
535	372	0.62	34144	57.04	582	263	0.44	48697	81.35	629	98	0.16	56741	94.78
536	358	0.60	34502	57.63	583	270	0.45	48967	81.80	630	93	0.16	56834	94.94
537	365	0.61	34867	58.24	584	283	0.47	49250	82.27	631	98	0.16	56932	95.10
538	345	0.58	35212	58.82	585	229	0.38	49479	82.65	632	105	0.18	57037	95.28
539	354	0.59	35566	59.41	586	249	0.42	49728	83.07	633	86	0.14	57123	95.42
540	368	0.61	35934	60.03	587	235	0.39	49963	83.46	634	74	0.12	57197	95.55
541	336	0.56	36270	60.59	588	213	0.36	50176	83.82	635	83	0.14	57280	95.69
542	326	0.54	36596	61.13	589	240	0.40	50416	84.22	636	79	0.13	57359	95.82
543	336	0.56	36932	61.69	590	203	0.34	50619	84.56	637	100	0.17	57459	95.98
544	352	0.59	37284	62.28	591	226	0.38	50845	84.94	638	64	0.11	57523	96.09
545	326	0.54	37610	62.83	592	220	0.37	51065	85.30	639	64	0.11	57587	96.20
546	357	0.60	37967	63.42	593	208	0.35	51273	85.65	640	71	0.12	57658	96.32
547	337	0.56	38304	63.99	594	185	0.31	51458	85.96	641	68	0.11	57726	96.43
548	336	0.56	38640	64.55	595	214	0.36	51672	86.32	642	64	0.11	57790	96.54
549	330	0.55	38970	65.10	596	210	0.35	51882	86.67	643	72	0.12	57862	96.66
550	328	0.55	39298	65.65	597	216	0.36	52098	87.03	644	61	0.10	57923	96.76
551	313	0.52	39611	66.17	598	199	0.33	52297	87.36	645	70	0.12	57993	96.88
552	325	0.54	39936	66.71	599	188	0.31	52485	87.68	646	67	0.11	58060	96.99
553	323	0.54	40259	67.25	600	199	0.33	52684	88.01	647	46	0.08	58106	97.06
554	344	0.57	40603	67.83	601	206	0.34	52890	88.35	648	55	0.09	58161	97.16
555	319	0.53	40922	68.36	602	177	0.30	53067	88.65	649	38	0.06	58199	97.22
556	305	0.51	41227	68.87	603	155	0.26	53222	88.91	650	51	0.09	58250	97.31
557	308	0.51	41535	69.38	604	172	0.29	53394	89.19	651	51	0.09	58301	97.39
558	322	0.54	41857	69.92	605	166	0.28	53560	89.47	652	45	0.08	58346	97.47
559	325	0.54	42182	70.46	606	178	0.30	53738	89.77	653	59	0.10	58405	97.56

**Table 171. Mathematics Grade 5 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
654	54	0.09	58459	97.65	701	9	0.02	59539	99.46	764	2	0.00	59775	99.85
655	40	0.07	58499	97.72	702	9	0.02	59548	99.47	765	3	0.01	59778	99.86
656	48	0.08	58547	97.80	703	16	0.03	59564	99.50	766	4	0.01	59782	99.86
657	27	0.05	58574	97.85	704	14	0.02	59578	99.52	768	4	0.01	59786	99.87
658	48	0.08	58622	97.93	705	4	0.01	59582	99.53	770	5	0.01	59791	99.88
659	50	0.08	58672	98.01	706	13	0.02	59595	99.55	771	7	0.01	59798	99.89
660	48	0.08	58720	98.09	707	15	0.03	59610	99.58	775	6	0.01	59804	99.90
661	35	0.06	58755	98.15	708	13	0.02	59623	99.60	777	2	0.00	59806	99.90
662	37	0.06	58792	98.21	709	8	0.01	59631	99.61	778	15	0.03	59821	99.93
663	38	0.06	58830	98.27	710	3	0.01	59634	99.62	790	12	0.02	59833	99.95
664	24	0.04	58854	98.31	711	8	0.01	59642	99.63	800	30	0.05	59863	100
665	27	0.05	58881	98.36	712	4	0.01	59646	99.64					
666	24	0.04	58905	98.40	713	6	0.01	59652	99.65					
667	27	0.05	58932	98.44	714	7	0.01	59659	99.66					
668	33	0.06	58965	98.50	715	4	0.01	59663	99.67					
669	23	0.04	58988	98.54	716	5	0.01	59668	99.67					
670	32	0.05	59020	98.59	718	4	0.01	59672	99.68					
671	23	0.04	59043	98.63	719	1	0.00	59673	99.68					
672	29	0.05	59072	98.68	720	3	0.01	59676	99.69					
673	29	0.05	59101	98.73	721	5	0.01	59681	99.70					
674	20	0.03	59121	98.76	722	1	0.00	59682	99.70					
675	26	0.04	59147	98.80	723	1	0.00	59683	99.70					
676	18	0.03	59165	98.83	724	3	0.01	59686	99.70					
677	22	0.04	59187	98.87	725	4	0.01	59690	99.71					
678	18	0.03	59205	98.90	726	5	0.01	59695	99.72					
679	20	0.03	59225	98.93	727	8	0.01	59703	99.73					
680	20	0.03	59245	98.97	728	12	0.02	59715	99.75					
681	21	0.04	59266	99.00	729	6	0.01	59721	99.76					
682	18	0.03	59284	99.03	730	1	0.00	59722	99.76					
683	11	0.02	59295	99.05	731	1	0.00	59723	99.77					
684	17	0.03	59312	99.08	732	4	0.01	59727	99.77					
685	16	0.03	59328	99.11	733	2	0.00	59729	99.78					
686	29	0.05	59357	99.15	734	1	0.00	59730	99.78					
687	11	0.02	59368	99.17	735	4	0.01	59734	99.78					
688	16	0.03	59384	99.20	736	4	0.01	59738	99.79					
689	9	0.02	59393	99.21	738	1	0.00	59739	99.79					
690	23	0.04	59416	99.25	739	2	0.00	59741	99.80					
691	8	0.01	59424	99.27	741	8	0.01	59749	99.81					
692	14	0.02	59438	99.29	742	1	0.00	59750	99.81					
693	16	0.03	59454	99.32	743	3	0.01	59753	99.82					
694	11	0.02	59465	99.34	745	7	0.01	59760	99.83					
695	24	0.04	59489	99.38	746	5	0.01	59765	99.84					
696	10	0.02	59499	99.39	754	1	0.00	59766	99.84					
697	12	0.02	59511	99.41	755	2	0.00	59768	99.84					
698	4	0.01	59515	99.42	756	1	0.00	59769	99.84					
699	7	0.01	59522	99.43	758	3	0.01	59772	99.85					
700	8	0.01	59530	99.44	761	1	0.00	59773	99.85					

**Table 172. Science Grade 5 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
300	311	0.52	311	0.52	347	20	0.03	955	1.59	394	87	0.14	3504	5.84
301	8	0.01	319	0.53	348	33	0.05	988	1.65	395	100	0.17	3604	6.00
302	3	0.00	322	0.54	349	34	0.06	1022	1.70	396	87	0.14	3691	6.15
303	6	0.01	328	0.55	350	29	0.05	1051	1.75	397	97	0.16	3788	6.31
304	9	0.01	337	0.56	351	32	0.05	1083	1.80	398	94	0.16	3882	6.47
305	7	0.01	344	0.57	352	31	0.05	1114	1.86	399	104	0.17	3986	6.64
306	5	0.01	349	0.58	353	27	0.04	1141	1.90	400	91	0.15	4077	6.79
307	5	0.01	354	0.59	354	51	0.08	1192	1.99	401	103	0.17	4180	6.96
308	6	0.01	360	0.60	355	34	0.06	1226	2.04	402	98	0.16	4278	7.12
309	7	0.01	367	0.61	356	33	0.05	1259	2.10	403	108	0.18	4386	7.30
310	7	0.01	374	0.62	357	27	0.04	1286	2.14	404	92	0.15	4478	7.46
311	9	0.01	383	0.64	358	26	0.04	1312	2.19	405	133	0.22	4611	7.68
312	16	0.03	399	0.66	359	32	0.05	1344	2.24	406	133	0.22	4744	7.90
313	7	0.01	406	0.68	360	36	0.06	1380	2.30	407	140	0.23	4884	8.13
314	12	0.02	418	0.70	361	39	0.06	1419	2.36	408	102	0.17	4986	8.30
315	5	0.01	423	0.70	362	44	0.07	1463	2.44	409	132	0.22	5118	8.52
316	10	0.02	433	0.72	363	36	0.06	1499	2.50	410	161	0.27	5279	8.79
317	17	0.03	450	0.75	364	44	0.07	1543	2.57	411	121	0.20	5400	8.99
318	12	0.02	462	0.77	365	54	0.09	1597	2.66	412	121	0.20	5521	9.20
319	10	0.02	472	0.79	366	50	0.08	1647	2.74	413	134	0.22	5655	9.42
320	5	0.01	477	0.79	367	38	0.06	1685	2.81	414	135	0.22	5790	9.64
321	7	0.01	484	0.81	368	56	0.09	1741	2.90	415	148	0.25	5938	9.89
322	9	0.01	493	0.82	369	37	0.06	1778	2.96	416	142	0.24	6080	10.13
323	12	0.02	505	0.84	370	51	0.08	1829	3.05	417	141	0.23	6221	10.36
324	17	0.03	522	0.87	371	42	0.07	1871	3.12	418	166	0.28	6387	10.64
325	15	0.02	537	0.89	372	48	0.08	1919	3.20	419	168	0.28	6555	10.92
326	14	0.02	551	0.92	373	58	0.10	1977	3.29	420	155	0.26	6710	11.18
327	12	0.02	563	0.94	374	48	0.08	2025	3.37	421	145	0.24	6855	11.42
328	5	0.01	568	0.95	375	47	0.08	2072	3.45	422	168	0.28	7023	11.70
329	12	0.02	580	0.97	376	52	0.09	2124	3.54	423	183	0.30	7206	12.00
330	25	0.04	605	1.01	377	57	0.09	2181	3.63	424	162	0.27	7368	12.27
331	12	0.02	617	1.03	378	51	0.08	2232	3.72	425	196	0.33	7564	12.60
332	16	0.03	633	1.05	379	58	0.10	2290	3.81	426	175	0.29	7739	12.89
333	20	0.03	653	1.09	380	65	0.11	2355	3.92	427	185	0.31	7924	13.20
334	19	0.03	672	1.12	381	59	0.10	2414	4.02	428	197	0.33	8121	13.53
335	16	0.03	688	1.15	382	68	0.11	2482	4.13	429	212	0.35	8333	13.88
336	25	0.04	713	1.19	383	76	0.13	2558	4.26	430	164	0.27	8497	14.15
337	22	0.04	735	1.22	384	74	0.12	2632	4.38	431	189	0.31	8686	14.47
338	27	0.04	762	1.27	385	68	0.11	2700	4.50	432	202	0.34	8888	14.80
339	21	0.03	783	1.30	386	94	0.16	2794	4.65	433	210	0.35	9098	15.15
340	15	0.02	798	1.33	387	80	0.13	2874	4.79	434	204	0.34	9302	15.49
341	15	0.02	813	1.35	388	87	0.14	2961	4.93	435	185	0.31	9487	15.80
342	28	0.05	841	1.40	389	80	0.13	3041	5.06	436	229	0.38	9716	16.18
343	21	0.03	862	1.44	390	84	0.14	3125	5.20	437	207	0.34	9923	16.53
344	20	0.03	882	1.47	391	98	0.16	3223	5.37	438	196	0.33	10119	16.85
345	30	0.05	912	1.52	392	93	0.15	3316	5.52	439	225	0.37	10344	17.23
346	23	0.04	935	1.56	393	101	0.17	3417	5.69	440	214	0.36	10558	17.58



**Table 172. Science Grade 5 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
441	248	0.41	10806	18.00	488	341	0.57	24721	41.17	535	353	0.59	42306	70.46
442	232	0.39	11038	18.38	489	351	0.58	25072	41.76	536	358	0.60	42664	71.06
443	211	0.35	11249	18.73	490	343	0.57	25415	42.33	537	331	0.55	42995	71.61
444	232	0.39	11481	19.12	491	335	0.56	25750	42.89	538	345	0.57	43340	72.18
445	252	0.42	11733	19.54	492	385	0.64	26135	43.53	539	340	0.57	43680	72.75
446	232	0.39	11965	19.93	493	376	0.63	26511	44.15	540	340	0.57	44020	73.31
447	237	0.39	12202	20.32	494	371	0.62	26882	44.77	541	346	0.58	44366	73.89
448	250	0.42	12452	20.74	495	380	0.63	27262	45.40	542	352	0.59	44718	74.48
449	280	0.47	12732	21.20	496	405	0.67	27667	46.08	543	350	0.58	45068	75.06
450	256	0.43	12988	21.63	497	375	0.62	28042	46.70	544	371	0.62	45439	75.68
451	276	0.46	13264	22.09	498	425	0.71	28467	47.41	545	323	0.54	45762	76.22
452	267	0.44	13531	22.54	499	375	0.62	28842	48.04	546	316	0.53	46078	76.74
453	268	0.45	13799	22.98	500	389	0.65	29231	48.68	547	303	0.50	46381	77.25
454	284	0.47	14083	23.45	501	377	0.63	29608	49.31	548	308	0.51	46689	77.76
455	274	0.46	14357	23.91	502	372	0.62	29980	49.93	549	347	0.58	47036	78.34
456	288	0.48	14645	24.39	503	395	0.66	30375	50.59	550	302	0.50	47338	78.84
457	278	0.46	14923	24.85	504	349	0.58	30724	51.17	551	313	0.52	47651	79.36
458	278	0.46	15201	25.32	505	386	0.64	31110	51.81	552	318	0.53	47969	79.89
459	274	0.46	15475	25.77	506	400	0.67	31510	52.48	553	296	0.49	48265	80.38
460	275	0.46	15750	26.23	507	401	0.67	31911	53.15	554	290	0.48	48555	80.87
461	319	0.53	16069	26.76	508	375	0.62	32286	53.77	555	290	0.48	48845	81.35
462	294	0.49	16363	27.25	509	357	0.59	32643	54.37	556	288	0.48	49133	81.83
463	304	0.51	16667	27.76	510	377	0.63	33020	54.99	557	296	0.49	49429	82.32
464	288	0.48	16955	28.24	511	363	0.60	33383	55.60	558	300	0.50	49729	82.82
465	290	0.48	17245	28.72	512	398	0.66	33781	56.26	559	286	0.48	50015	83.30
466	302	0.50	17547	29.22	513	353	0.59	34134	56.85	560	262	0.44	50277	83.73
467	285	0.47	17832	29.70	514	357	0.59	34491	57.44	561	287	0.48	50564	84.21
468	298	0.50	18130	30.20	515	402	0.67	34893	58.11	562	268	0.45	50832	84.66
469	294	0.49	18424	30.68	516	396	0.66	35289	58.77	563	245	0.41	51077	85.07
470	327	0.54	18751	31.23	517	370	0.62	35659	59.39	564	252	0.42	51329	85.49
471	312	0.52	19063	31.75	518	365	0.61	36024	60.00	565	269	0.45	51598	85.94
472	307	0.51	19370	32.26	519	386	0.64	36410	60.64	566	252	0.42	51850	86.35
473	332	0.55	19702	32.81	520	366	0.61	36776	61.25	567	253	0.42	52103	86.78
474	302	0.50	20004	33.32	521	384	0.64	37160	61.89	568	232	0.39	52335	87.16
475	307	0.51	20311	33.83	522	366	0.61	37526	62.50	569	241	0.40	52576	87.56
476	316	0.53	20627	34.35	523	365	0.61	37891	63.11	570	230	0.38	52806	87.95
477	330	0.55	20957	34.90	524	378	0.63	38269	63.74	571	213	0.35	53019	88.30
478	326	0.54	21283	35.45	525	364	0.61	38633	64.34	572	191	0.32	53210	88.62
479	325	0.54	21608	35.99	526	360	0.60	38993	64.94	573	208	0.35	53418	88.97
480	332	0.55	21940	36.54	527	380	0.63	39373	65.57	574	217	0.36	53635	89.33
481	348	0.58	22288	37.12	528	366	0.61	39739	66.18	575	199	0.33	53834	89.66
482	350	0.58	22638	37.70	529	396	0.66	40135	66.84	576	212	0.35	54046	90.01
483	358	0.60	22996	38.30	530	377	0.63	40512	67.47	577	206	0.34	54252	90.36
484	330	0.55	23326	38.85	531	375	0.62	40887	68.10	578	197	0.33	54449	90.68
485	339	0.56	23665	39.41	532	373	0.62	41260	68.72	579	201	0.33	54650	91.02
486	360	0.60	24025	40.01	533	364	0.61	41624	69.32	580	144	0.24	54794	91.26
487	355	0.59	24380	40.60	534	329	0.55	41953	69.87	581	168	0.28	54962	91.54

**Table 172. Science Grade 5 Scale Score Distribution (continued)**

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
582	182	0.30	55144	91.84	629	29	0.05	59467	99.04	677	2	0.00	60005	99.94
583	162	0.27	55306	92.11	630	33	0.05	59500	99.10	678	1	0.00	60006	99.94
584	179	0.30	55485	92.41	631	38	0.06	59538	99.16	679	3	0.00	60009	99.94
585	168	0.28	55653	92.69	632	33	0.05	59571	99.21	680	3	0.00	60012	99.95
586	180	0.30	55833	92.99	633	22	0.04	59593	99.25	681	2	0.00	60014	99.95
587	168	0.28	56001	93.27	634	26	0.04	59619	99.29	682	1	0.00	60015	99.95
588	168	0.28	56169	93.55	635	25	0.04	59644	99.34	683	1	0.00	60016	99.96
589	160	0.27	56329	93.81	636	20	0.03	59664	99.37	684	1	0.00	60017	99.96
590	154	0.26	56483	94.07	637	22	0.04	59686	99.41	686	1	0.00	60018	99.96
591	135	0.22	56618	94.30	638	12	0.02	59698	99.43	687	1	0.00	60019	99.96
592	129	0.21	56747	94.51	639	16	0.03	59714	99.45	688	2	0.00	60021	99.96
593	109	0.18	56856	94.69	640	16	0.03	59730	99.48	689	1	0.00	60022	99.97
594	99	0.16	56955	94.86	641	17	0.03	59747	99.51	690	2	0.00	60024	99.97
595	108	0.18	57063	95.04	642	10	0.02	59757	99.52	691	1	0.00	60025	99.97
596	128	0.21	57191	95.25	643	23	0.04	59780	99.56	692	2	0.00	60027	99.97
597	115	0.19	57306	95.44	644	11	0.02	59791	99.58	698	2	0.00	60029	99.98
598	120	0.20	57426	95.64	645	9	0.01	59800	99.60	699	1	0.00	60030	99.98
599	98	0.16	57524	95.80	646	14	0.02	59814	99.62	701	1	0.00	60031	99.98
600	111	0.18	57635	95.99	647	16	0.03	59830	99.65	703	1	0.00	60032	99.98
601	110	0.18	57745	96.17	648	9	0.01	59839	99.66	704	1	0.00	60033	99.98
602	78	0.13	57823	96.30	649	12	0.02	59851	99.68	705	1	0.00	60034	99.99
603	96	0.16	57919	96.46	650	10	0.02	59861	99.70	709	1	0.00	60035	99.99
604	101	0.17	58020	96.63	651	7	0.01	59868	99.71	714	1	0.00	60036	99.99
605	105	0.17	58125	96.81	652	7	0.01	59875	99.72	718	1	0.00	60037	99.99
606	84	0.14	58209	96.95	653	4	0.01	59879	99.73	719	1	0.00	60038	99.99
607	101	0.17	58310	97.11	654	7	0.01	59886	99.74	734	1	0.00	60039	99.99
608	81	0.13	58391	97.25	655	12	0.02	59898	99.76	735	1	0.00	60040	100
609	79	0.13	58470	97.38	656	12	0.02	59910	99.78	746	1	0.00	60041	100
610	84	0.14	58554	97.52	657	11	0.02	59921	99.80	764	1	0.00	60042	100
611	68	0.11	58622	97.63	658	9	0.01	59930	99.81	900	1	0.00	60043	100
612	69	0.11	58691	97.75	659	4	0.01	59934	99.82					
613	64	0.11	58755	97.85	660	5	0.01	59939	99.83					
614	60	0.10	58815	97.95	661	7	0.01	59946	99.84					
615	48	0.08	58863	98.03	662	7	0.01	59953	99.85					
616	67	0.11	58930	98.15	663	4	0.01	59957	99.86					
617	45	0.07	58975	98.22	664	6	0.01	59963	99.87					
618	52	0.09	59027	98.31	665	5	0.01	59968	99.88					
619	47	0.08	59074	98.39	666	3	0.00	59971	99.88					
620	45	0.07	59119	98.46	667	3	0.00	59974	99.89					
621	38	0.06	59157	98.52	668	5	0.01	59979	99.89					
622	56	0.09	59213	98.62	669	2	0.00	59981	99.90					
623	51	0.08	59264	98.70	670	6	0.01	59987	99.91					
624	42	0.07	59306	98.77	671	2	0.00	59989	99.91					
625	42	0.07	59348	98.84	672	2	0.00	59991	99.91					
626	26	0.04	59374	98.89	674	1	0.00	59992	99.92					
627	33	0.05	59407	98.94	675	4	0.01	59996	99.92					
628	31	0.05	59438	98.99	676	7	0.01	60003	99.93					

**Table 173. Reading Grade 6 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
260	254	0.43	254	0.43	381	1	0.00	354	0.60	429	9	0.02	613	1.04
306	1	0.00	255	0.43	383	1	0.00	355	0.60	430	5	0.01	618	1.05
315	1	0.00	256	0.44	384	4	0.01	359	0.61	431	9	0.02	627	1.07
317	1	0.00	257	0.44	385	3	0.01	362	0.62	432	8	0.01	635	1.08
321	1	0.00	258	0.44	386	1	0.00	363	0.62	433	15	0.03	650	1.11
324	1	0.00	259	0.44	387	3	0.01	366	0.62	434	5	0.01	655	1.11
325	2	0.00	261	0.44	388	1	0.00	367	0.62	435	13	0.02	668	1.14
330	1	0.00	262	0.45	389	3	0.01	370	0.63	436	9	0.02	677	1.15
334	1	0.00	263	0.45	390	4	0.01	374	0.64	437	12	0.02	689	1.17
336	1	0.00	264	0.45	391	3	0.01	377	0.64	438	11	0.02	700	1.19
338	1	0.00	265	0.45	392	8	0.01	385	0.65	439	12	0.02	712	1.21
339	3	0.01	268	0.46	393	6	0.01	391	0.66	440	8	0.01	720	1.22
341	1	0.00	269	0.46	394	2	0.00	393	0.67	441	12	0.02	732	1.24
342	1	0.00	270	0.46	395	1	0.00	394	0.67	442	16	0.03	748	1.27
343	2	0.00	272	0.46	396	3	0.01	397	0.67	443	13	0.02	761	1.29
344	1	0.00	273	0.46	397	4	0.01	401	0.68	444	17	0.03	778	1.32
345	2	0.00	275	0.47	398	8	0.01	409	0.70	445	11	0.02	789	1.34
346	3	0.01	278	0.47	399	1	0.00	410	0.70	446	14	0.02	803	1.37
347	3	0.01	281	0.48	400	4	0.01	414	0.70	447	14	0.02	817	1.39
349	4	0.01	285	0.48	401	6	0.01	420	0.71	448	18	0.03	835	1.42
350	3	0.01	288	0.49	402	3	0.01	423	0.72	449	14	0.02	849	1.44
351	1	0.00	289	0.49	403	6	0.01	429	0.73	450	20	0.03	869	1.48
352	1	0.00	290	0.49	404	4	0.01	433	0.74	451	21	0.04	890	1.51
353	1	0.00	291	0.49	405	7	0.01	440	0.75	452	15	0.03	905	1.54
354	2	0.00	293	0.50	406	3	0.01	443	0.75	453	20	0.03	925	1.57
356	1	0.00	294	0.50	407	7	0.01	450	0.77	454	17	0.03	942	1.60
357	1	0.00	295	0.50	408	9	0.02	459	0.78	455	25	0.04	967	1.64
358	1	0.00	296	0.50	409	3	0.01	462	0.79	456	21	0.04	988	1.68
359	4	0.01	300	0.51	410	8	0.01	470	0.80	457	16	0.03	1004	1.71
361	3	0.01	303	0.52	411	5	0.01	475	0.81	458	10	0.02	1014	1.72
363	3	0.01	306	0.52	412	5	0.01	480	0.82	459	27	0.05	1041	1.77
364	2	0.00	308	0.52	413	7	0.01	487	0.83	460	22	0.04	1063	1.81
365	4	0.01	312	0.53	414	8	0.01	495	0.84	461	25	0.04	1088	1.85
366	3	0.01	315	0.54	415	10	0.02	505	0.86	462	19	0.03	1107	1.88
367	3	0.01	318	0.54	416	8	0.01	513	0.87	463	18	0.03	1125	1.91
368	2	0.00	320	0.54	417	3	0.01	516	0.88	464	16	0.03	1141	1.94
369	5	0.01	325	0.55	418	4	0.01	520	0.88	465	25	0.04	1166	1.98
370	2	0.00	327	0.56	419	10	0.02	530	0.90	466	27	0.05	1193	2.03
371	2	0.00	329	0.56	420	5	0.01	535	0.91	467	21	0.04	1214	2.06
372	4	0.01	333	0.57	421	6	0.01	541	0.92	468	19	0.03	1233	2.10
373	2	0.00	335	0.57	422	9	0.02	550	0.94	469	25	0.04	1258	2.14
375	1	0.00	336	0.57	423	11	0.02	561	0.95	470	28	0.05	1286	2.19
376	5	0.01	341	0.58	424	1	0.00	562	0.96	471	31	0.05	1317	2.24
377	4	0.01	345	0.59	425	10	0.02	572	0.97	472	31	0.05	1348	2.29
378	3	0.01	348	0.59	426	10	0.02	582	0.99	473	31	0.05	1379	2.34
379	2	0.00	350	0.60	427	11	0.02	593	1.01	474	34	0.06	1413	2.40
380	3	0.01	353	0.60	428	11	0.02	604	1.03	475	26	0.04	1439	2.45

**Table 173. Reading Grade 6 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
476	26	0.04	1465	2.49	523	54	0.09	3724	6.33	570	172	0.29	9283	15.78
477	33	0.06	1498	2.55	524	78	0.13	3802	6.46	571	184	0.31	9467	16.10
478	32	0.05	1530	2.60	525	86	0.15	3888	6.61	572	193	0.33	9660	16.42
479	37	0.06	1567	2.66	526	82	0.14	3970	6.75	573	189	0.32	9849	16.75
480	29	0.05	1596	2.71	527	80	0.14	4050	6.89	574	172	0.29	10021	17.04
481	34	0.06	1630	2.77	528	74	0.13	4124	7.01	575	174	0.30	10195	17.33
482	33	0.06	1663	2.83	529	85	0.14	4209	7.16	576	197	0.33	10392	17.67
483	27	0.05	1690	2.87	530	88	0.15	4297	7.31	577	197	0.33	10589	18.00
484	25	0.04	1715	2.92	531	72	0.12	4369	7.43	578	210	0.36	10799	18.36
485	39	0.07	1754	2.98	532	65	0.11	4434	7.54	579	236	0.40	11035	18.76
486	39	0.07	1793	3.05	533	99	0.17	4533	7.71	580	205	0.35	11240	19.11
487	43	0.07	1836	3.12	534	83	0.14	4616	7.85	581	211	0.36	11451	19.47
488	28	0.05	1864	3.17	535	98	0.17	4714	8.01	582	201	0.34	11652	19.81
489	47	0.08	1911	3.25	536	98	0.17	4812	8.18	583	213	0.36	11865	20.17
490	24	0.04	1935	3.29	537	89	0.15	4901	8.33	584	220	0.37	12085	20.55
491	43	0.07	1978	3.36	538	98	0.17	4999	8.50	585	236	0.40	12321	20.95
492	29	0.05	2007	3.41	539	89	0.15	5088	8.65	586	239	0.41	12560	21.35
493	37	0.06	2044	3.48	540	109	0.19	5197	8.84	587	260	0.44	12820	21.80
494	50	0.09	2094	3.56	541	76	0.13	5273	8.97	588	253	0.43	13073	22.23
495	37	0.06	2131	3.62	542	91	0.15	5364	9.12	589	277	0.47	13350	22.70
496	54	0.09	2185	3.71	543	116	0.20	5480	9.32	590	245	0.42	13595	23.11
497	51	0.09	2236	3.80	544	109	0.19	5589	9.50	591	262	0.45	13857	23.56
498	50	0.09	2286	3.89	545	109	0.19	5698	9.69	592	254	0.43	14111	23.99
499	43	0.07	2329	3.96	546	121	0.21	5819	9.89	593	256	0.44	14367	24.43
500	52	0.09	2381	4.05	547	114	0.19	5933	10.09	594	249	0.42	14616	24.85
501	45	0.08	2426	4.12	548	112	0.19	6045	10.28	595	274	0.47	14890	25.32
502	49	0.08	2475	4.21	549	105	0.18	6150	10.46	596	286	0.49	15176	25.80
503	48	0.08	2523	4.29	550	121	0.21	6271	10.66	597	273	0.46	15449	26.27
504	49	0.08	2572	4.37	551	110	0.19	6381	10.85	598	279	0.47	15728	26.74
505	56	0.10	2628	4.47	552	126	0.21	6507	11.06	599	281	0.48	16009	27.22
506	51	0.09	2679	4.55	553	132	0.22	6639	11.29	600	323	0.55	16332	27.77
507	46	0.08	2725	4.63	554	118	0.20	6757	11.49	601	337	0.57	16669	28.34
508	53	0.09	2778	4.72	555	141	0.24	6898	11.73	602	262	0.45	16931	28.79
509	65	0.11	2843	4.83	556	134	0.23	7032	11.96	603	322	0.55	17253	29.33
510	52	0.09	2895	4.92	557	134	0.23	7166	12.18	604	297	0.50	17550	29.84
511	62	0.11	2957	5.03	558	144	0.24	7310	12.43	605	303	0.52	17853	30.35
512	72	0.12	3029	5.15	559	145	0.25	7455	12.68	606	337	0.57	18190	30.93
513	54	0.09	3083	5.24	560	148	0.25	7603	12.93	607	345	0.59	18535	31.51
514	51	0.09	3134	5.33	561	169	0.29	7772	13.21	608	327	0.56	18862	32.07
515	54	0.09	3188	5.42	562	154	0.26	7926	13.48	609	323	0.55	19185	32.62
516	62	0.11	3250	5.53	563	177	0.30	8103	13.78	610	306	0.52	19491	33.14
517	62	0.11	3312	5.63	564	163	0.28	8266	14.05	611	339	0.58	19830	33.72
518	64	0.11	3376	5.74	565	152	0.26	8418	14.31	612	349	0.59	20179	34.31
519	68	0.12	3444	5.86	566	171	0.29	8589	14.60	613	356	0.61	20535	34.91
520	68	0.12	3512	5.97	567	187	0.32	8776	14.92	614	360	0.61	20895	35.53
521	75	0.13	3587	6.10	568	164	0.28	8940	15.20	615	341	0.58	21236	36.11
522	83	0.14	3670	6.24	569	171	0.29	9111	15.49	616	358	0.61	21594	36.71

**Table 173. Reading Grade 6 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
617	408	0.69	22002	37.41	664	387	0.66	41299	70.22	711	174	0.30	54408	92.51
618	387	0.66	22389	38.07	665	396	0.67	41695	70.89	712	146	0.25	54554	92.75
619	370	0.63	22759	38.70	666	416	0.71	42111	71.60	713	138	0.23	54692	92.99
620	368	0.63	23127	39.32	667	407	0.69	42518	72.29	714	149	0.25	54841	93.24
621	402	0.68	23529	40.00	668	349	0.59	42867	72.88	715	151	0.26	54992	93.50
622	385	0.65	23914	40.66	669	369	0.63	43236	73.51	716	137	0.23	55129	93.73
623	403	0.69	24317	41.34	670	344	0.58	43580	74.10	717	135	0.23	55264	93.96
624	407	0.69	24724	42.04	671	344	0.58	43924	74.68	718	136	0.23	55400	94.19
625	375	0.64	25099	42.67	672	357	0.61	44281	75.29	719	143	0.24	55543	94.44
626	422	0.72	25521	43.39	673	339	0.58	44620	75.86	720	127	0.22	55670	94.65
627	394	0.67	25915	44.06	674	329	0.56	44949	76.42	721	132	0.22	55802	94.88
628	395	0.67	26310	44.73	675	354	0.60	45303	77.02	722	131	0.22	55933	95.10
629	389	0.66	26699	45.39	676	347	0.59	45650	77.61	723	106	0.18	56039	95.28
630	426	0.72	27125	46.12	677	335	0.57	45985	78.18	724	118	0.20	56157	95.48
631	429	0.73	27554	46.85	678	344	0.58	46329	78.77	725	114	0.19	56271	95.67
632	425	0.72	27979	47.57	679	354	0.60	46683	79.37	726	108	0.18	56379	95.86
633	419	0.71	28398	48.28	680	298	0.51	46981	79.88	727	107	0.18	56486	96.04
634	410	0.70	28808	48.98	681	297	0.50	47278	80.38	728	97	0.16	56583	96.20
635	463	0.79	29271	49.77	682	305	0.52	47583	80.90	729	91	0.15	56674	96.36
636	395	0.67	29666	50.44	683	344	0.58	47927	81.49	730	82	0.14	56756	96.50
637	422	0.72	30088	51.16	684	286	0.49	48213	81.97	731	71	0.12	56827	96.62
638	432	0.73	30520	51.89	685	285	0.48	48498	82.46	732	101	0.17	56928	96.79
639	419	0.71	30939	52.60	686	294	0.50	48792	82.96	733	86	0.15	57014	96.94
640	444	0.75	31383	53.36	687	302	0.51	49094	83.47	734	68	0.12	57082	97.05
641	398	0.68	31781	54.03	688	272	0.46	49366	83.93	735	68	0.12	57150	97.17
642	442	0.75	32223	54.79	689	265	0.45	49631	84.38	736	69	0.12	57219	97.28
643	456	0.78	32679	55.56	690	275	0.47	49906	84.85	737	68	0.12	57287	97.40
644	449	0.76	33128	56.32	691	269	0.46	50175	85.31	738	45	0.08	57332	97.48
645	420	0.71	33548	57.04	692	240	0.41	50415	85.72	739	62	0.11	57394	97.58
646	431	0.73	33979	57.77	693	267	0.45	50682	86.17	740	73	0.12	57467	97.71
647	441	0.75	34420	58.52	694	266	0.45	50948	86.62	741	53	0.09	57520	97.80
648	444	0.75	34864	59.28	695	228	0.39	51176	87.01	742	57	0.10	57577	97.89
649	386	0.66	35250	59.93	696	245	0.42	51421	87.43	743	45	0.08	57622	97.97
650	439	0.75	35689	60.68	697	221	0.38	51642	87.80	744	45	0.08	57667	98.05
651	400	0.68	36089	61.36	698	237	0.40	51879	88.21	745	47	0.08	57714	98.13
652	437	0.74	36526	62.10	699	225	0.38	52104	88.59	746	41	0.07	57755	98.20
653	410	0.70	36936	62.80	700	217	0.37	52321	88.96	747	40	0.07	57795	98.26
654	408	0.69	37344	63.49	701	219	0.37	52540	89.33	748	36	0.06	57831	98.33
655	413	0.70	37757	64.20	702	189	0.32	52729	89.65	749	42	0.07	57873	98.40
656	391	0.66	38148	64.86	703	208	0.35	52937	90.00	750	36	0.06	57909	98.46
657	379	0.64	38527	65.50	704	179	0.30	53116	90.31	751	43	0.07	57952	98.53
658	414	0.70	38941	66.21	705	224	0.38	53340	90.69	752	40	0.07	57992	98.60
659	418	0.71	39359	66.92	706	182	0.31	53522	91.00	753	37	0.06	58029	98.66
660	376	0.64	39735	67.56	707	203	0.35	53725	91.34	754	40	0.07	58069	98.73
661	395	0.67	40130	68.23	708	162	0.28	53887	91.62	755	29	0.05	58098	98.78
662	391	0.66	40521	68.89	709	164	0.28	54051	91.90	756	39	0.07	58137	98.85
663	391	0.66	40912	69.56	710	183	0.31	54234	92.21	757	40	0.07	58177	98.91

**Table 173. Reading Grade 6 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
758	25	0.04	58202	98.96	804	2	0.00	58739	99.87
759	34	0.06	58236	99.01	805	4	0.01	58743	99.88
760	31	0.05	58267	99.07	806	4	0.01	58747	99.88
761	24	0.04	58291	99.11	808	3	0.01	58750	99.89
762	22	0.04	58313	99.14	810	3	0.01	58753	99.89
763	25	0.04	58338	99.19	811	2	0.00	58755	99.90
764	23	0.04	58361	99.23	812	4	0.01	58759	99.90
765	21	0.04	58382	99.26	813	3	0.01	58762	99.91
766	22	0.04	58404	99.30	814	1	0.00	58763	99.91
767	22	0.04	58426	99.34	815	3	0.01	58766	99.91
768	19	0.03	58445	99.37	816	1	0.00	58767	99.92
769	19	0.03	58464	99.40	817	1	0.00	58768	99.92
770	17	0.03	58481	99.43	818	2	0.00	58770	99.92
771	18	0.03	58499	99.46	819	4	0.01	58774	99.93
772	7	0.01	58506	99.47	820	1	0.00	58775	99.93
773	18	0.03	58524	99.50	821	1	0.00	58776	99.93
774	11	0.02	58535	99.52	822	2	0.00	58778	99.94
775	20	0.03	58555	99.56	826	1	0.00	58779	99.94
776	8	0.01	58563	99.57	827	2	0.00	58781	99.94
777	8	0.01	58571	99.58	828	4	0.01	58785	99.95
778	12	0.02	58583	99.60	830	1	0.00	58786	99.95
779	6	0.01	58589	99.61	831	1	0.00	58787	99.95
780	10	0.02	58599	99.63	833	1	0.00	58788	99.95
781	11	0.02	58610	99.65	836	1	0.00	58789	99.95
782	6	0.01	58616	99.66	837	2	0.00	58791	99.96
783	12	0.02	58628	99.68	839	1	0.00	58792	99.96
784	12	0.02	58640	99.70	841	2	0.00	58794	99.96
785	8	0.01	58648	99.71	845	4	0.01	58798	99.97
786	4	0.01	58652	99.72	846	2	0.00	58800	99.97
787	6	0.01	58658	99.73	847	2	0.00	58802	99.98
788	7	0.01	58665	99.74	849	1	0.00	58803	99.98
789	8	0.01	58673	99.76	853	1	0.00	58804	99.98
790	3	0.01	58676	99.76	855	2	0.00	58806	99.98
791	12	0.02	58688	99.78	856	2	0.00	58808	99.99
792	4	0.01	58692	99.79	857	1	0.00	58809	99.99
793	6	0.01	58698	99.80	863	1	0.00	58810	99.99
794	4	0.01	58702	99.81	864	2	0.00	58812	99.99
795	4	0.01	58706	99.81	866	1	0.00	58813	99.99
796	6	0.01	58712	99.82	869	1	0.00	58814	100
797	4	0.01	58716	99.83	895	1	0.00	58815	100
798	8	0.01	58724	99.84	934	1	0.00	58816	100
799	4	0.01	58728	99.85					
800	1	0.00	58729	99.85					
801	3	0.01	58732	99.86					
802	2	0.00	58734	99.86					
803	3	0.01	58737	99.87					

**Table 174. Writing Grade 6 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
230	16	0.03	16	0.03	309	2	0.00	87	0.15	357	9	0.02	306	0.52
231	1	0.00	17	0.03	310	1	0.00	88	0.15	358	19	0.03	325	0.55
234	1	0.00	18	0.03	311	1	0.00	89	0.15	359	11	0.02	336	0.57
239	1	0.00	19	0.03	312	1	0.00	90	0.15	360	6	0.01	342	0.58
241	1	0.00	20	0.03	314	3	0.01	93	0.16	361	6	0.01	348	0.59
243	1	0.00	21	0.04	315	2	0.00	95	0.16	362	16	0.03	364	0.62
244	1	0.00	22	0.04	316	2	0.00	97	0.16	363	12	0.02	376	0.64
245	1	0.00	23	0.04	317	6	0.01	103	0.18	364	17	0.03	393	0.67
246	2	0.00	25	0.04	318	2	0.00	105	0.18	365	12	0.02	405	0.69
249	2	0.00	27	0.05	319	2	0.00	107	0.18	366	22	0.04	427	0.73
250	2	0.00	29	0.05	320	3	0.01	110	0.19	367	19	0.03	446	0.76
251	1	0.00	30	0.05	321	3	0.01	113	0.19	368	18	0.03	464	0.79
252	2	0.00	32	0.05	322	1	0.00	114	0.19	369	21	0.04	485	0.82
254	1	0.00	33	0.06	323	4	0.01	118	0.20	370	16	0.03	501	0.85
255	1	0.00	34	0.06	324	2	0.00	120	0.20	371	19	0.03	520	0.88
259	1	0.00	35	0.06	325	1	0.00	121	0.21	372	17	0.03	537	0.91
263	1	0.00	36	0.06	326	2	0.00	123	0.21	373	23	0.04	560	0.95
264	3	0.01	39	0.07	327	5	0.01	128	0.22	374	18	0.03	578	0.98
266	1	0.00	40	0.07	328	4	0.01	132	0.22	375	17	0.03	595	1.01
269	1	0.00	41	0.07	329	4	0.01	136	0.23	376	24	0.04	619	1.05
270	1	0.00	42	0.07	330	4	0.01	140	0.24	377	28	0.05	647	1.10
271	2	0.00	44	0.07	331	3	0.01	143	0.24	378	19	0.03	666	1.13
273	2	0.00	46	0.08	332	4	0.01	147	0.25	379	24	0.04	690	1.17
275	1	0.00	47	0.08	333	6	0.01	153	0.26	380	26	0.04	716	1.22
277	1	0.00	48	0.08	334	1	0.00	154	0.26	381	23	0.04	739	1.26
279	2	0.00	50	0.08	335	4	0.01	158	0.27	382	22	0.04	761	1.29
281	1	0.00	51	0.09	336	3	0.01	161	0.27	383	26	0.04	787	1.34
282	1	0.00	52	0.09	337	4	0.01	165	0.28	384	16	0.03	803	1.36
283	1	0.00	53	0.09	338	2	0.00	167	0.28	385	25	0.04	828	1.41
284	1	0.00	54	0.09	339	5	0.01	172	0.29	386	21	0.04	849	1.44
285	1	0.00	55	0.09	340	5	0.01	177	0.30	387	37	0.06	886	1.51
287	1	0.00	56	0.10	341	6	0.01	183	0.31	388	29	0.05	915	1.55
288	1	0.00	57	0.10	342	3	0.01	186	0.32	389	29	0.05	944	1.60
289	1	0.00	58	0.10	343	2	0.00	188	0.32	390	36	0.06	980	1.67
291	2	0.00	60	0.10	344	7	0.01	195	0.33	391	37	0.06	1017	1.73
293	4	0.01	64	0.11	345	7	0.01	202	0.34	392	32	0.05	1049	1.78
294	2	0.00	66	0.11	346	5	0.01	207	0.35	393	40	0.07	1089	1.85
297	4	0.01	70	0.12	347	10	0.02	217	0.37	394	41	0.07	1130	1.92
299	3	0.01	73	0.12	348	6	0.01	223	0.38	395	46	0.08	1176	2.00
300	1	0.00	74	0.13	349	4	0.01	227	0.39	396	40	0.07	1216	2.07
301	2	0.00	76	0.13	350	5	0.01	232	0.39	397	48	0.08	1264	2.15
302	1	0.00	77	0.13	351	4	0.01	236	0.40	398	38	0.06	1302	2.21
303	1	0.00	78	0.13	352	7	0.01	243	0.41	399	41	0.07	1343	2.28
304	2	0.00	80	0.14	353	6	0.01	249	0.42	400	39	0.07	1382	2.35
305	2	0.00	82	0.14	354	15	0.03	264	0.45	401	40	0.07	1422	2.42
306	2	0.00	84	0.14	355	18	0.03	282	0.48	402	49	0.08	1471	2.50
308	1	0.00	85	0.14	356	15	0.03	297	0.50	403	40	0.07	1511	2.57

**Table 174. Writing Grade 6 Scale Score Distribution (continued)**

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
404	60	0.10	1571	2.67	451	170	0.29	6637	11.28	498	393	0.67	19437	33.02
405	46	0.08	1617	2.75	452	170	0.29	6807	11.57	499	349	0.59	19786	33.62
406	49	0.08	1666	2.83	453	210	0.36	7017	11.92	500	405	0.69	20191	34.31
407	48	0.08	1714	2.91	454	195	0.33	7212	12.25	501	398	0.68	20589	34.98
408	77	0.13	1791	3.04	455	194	0.33	7406	12.58	502	406	0.69	20995	35.67
409	55	0.09	1846	3.14	456	202	0.34	7608	12.93	503	356	0.60	21351	36.28
410	61	0.10	1907	3.24	457	183	0.31	7791	13.24	504	400	0.68	21751	36.96
411	44	0.07	1951	3.31	458	196	0.33	7987	13.57	505	400	0.68	22151	37.64
412	73	0.12	2024	3.44	459	209	0.36	8196	13.93	506	392	0.67	22543	38.30
413	62	0.11	2086	3.54	460	212	0.36	8408	14.29	507	383	0.65	22926	38.95
414	67	0.11	2153	3.66	461	207	0.35	8615	14.64	508	427	0.73	23353	39.68
415	73	0.12	2226	3.78	462	209	0.36	8824	14.99	509	403	0.68	23756	40.36
416	80	0.14	2306	3.92	463	209	0.36	9033	15.35	510	388	0.66	24144	41.02
417	92	0.16	2398	4.07	464	209	0.36	9242	15.70	511	409	0.69	24553	41.72
418	89	0.15	2487	4.23	465	220	0.37	9462	16.08	512	375	0.64	24928	42.35
419	84	0.14	2571	4.37	466	232	0.39	9694	16.47	513	365	0.62	25293	42.97
420	90	0.15	2661	4.52	467	255	0.43	9949	16.90	514	446	0.76	25739	43.73
421	87	0.15	2748	4.67	468	242	0.41	10191	17.32	515	409	0.69	26148	44.43
422	71	0.12	2819	4.79	469	229	0.39	10420	17.70	516	410	0.70	26558	45.12
423	77	0.13	2896	4.92	470	234	0.40	10654	18.10	517	426	0.72	26984	45.85
424	106	0.18	3002	5.10	471	274	0.47	10928	18.57	518	413	0.70	27397	46.55
425	97	0.16	3099	5.27	472	270	0.46	11198	19.03	519	413	0.70	27810	47.25
426	102	0.17	3201	5.44	473	273	0.46	11471	19.49	520	431	0.73	28241	47.98
427	88	0.15	3289	5.59	474	280	0.48	11751	19.97	521	428	0.73	28669	48.71
428	112	0.19	3401	5.78	475	254	0.43	12005	20.40	522	419	0.71	29088	49.42
429	122	0.21	3523	5.99	476	260	0.44	12265	20.84	523	430	0.73	29518	50.15
430	115	0.20	3638	6.18	477	274	0.47	12539	21.30	524	418	0.71	29936	50.86
431	118	0.20	3756	6.38	478	295	0.50	12834	21.81	525	415	0.71	30351	51.57
432	112	0.19	3868	6.57	479	259	0.44	13093	22.25	526	393	0.67	30744	52.24
433	125	0.21	3993	6.78	480	316	0.54	13409	22.78	527	417	0.71	31161	52.94
434	134	0.23	4127	7.01	481	295	0.50	13704	23.28	528	429	0.73	31590	53.67
435	119	0.20	4246	7.21	482	291	0.49	13995	23.78	529	402	0.68	31992	54.36
436	134	0.23	4380	7.44	483	290	0.49	14285	24.27	530	430	0.73	32422	55.09
437	131	0.22	4511	7.66	484	294	0.50	14579	24.77	531	401	0.68	32823	55.77
438	140	0.24	4651	7.90	485	321	0.55	14900	25.32	532	416	0.71	33239	56.48
439	112	0.19	4763	8.09	486	323	0.55	15223	25.86	533	432	0.73	33671	57.21
440	136	0.23	4899	8.32	487	313	0.53	15536	26.40	534	395	0.67	34066	57.88
441	160	0.27	5059	8.60	488	315	0.54	15851	26.93	535	381	0.65	34447	58.53
442	145	0.25	5204	8.84	489	323	0.55	16174	27.48	536	374	0.64	34821	59.16
443	132	0.22	5336	9.07	490	344	0.58	16518	28.07	537	392	0.67	35213	59.83
444	140	0.24	5476	9.30	491	327	0.56	16845	28.62	538	408	0.69	35621	60.52
445	145	0.25	5621	9.55	492	348	0.59	17193	29.21	539	394	0.67	36015	61.19
446	183	0.31	5804	9.86	493	373	0.63	17566	29.85	540	371	0.63	36386	61.82
447	148	0.25	5952	10.11	494	360	0.61	17926	30.46	541	436	0.74	36822	62.56
448	169	0.29	6121	10.40	495	385	0.65	18311	31.11	542	369	0.63	37191	63.19
449	180	0.31	6301	10.71	496	365	0.62	18676	31.73	543	381	0.65	37572	63.84
450	166	0.28	6467	10.99	497	368	0.63	19044	32.36	544	394	0.67	37966	64.51



**Table 174. Writing Grade 6 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
545	378	0.64	38344	65.15	592	174	0.30	51752	87.93	639	41	0.07	57062	96.95
546	398	0.68	38742	65.83	593	161	0.27	51913	88.20	640	92	0.16	57154	97.11
547	387	0.66	39129	66.48	594	198	0.34	52111	88.54	641	55	0.09	57209	97.20
548	393	0.67	39522	67.15	595	191	0.32	52302	88.86	642	43	0.07	57252	97.27
549	363	0.62	39885	67.77	596	184	0.31	52486	89.18	643	41	0.07	57293	97.34
550	350	0.59	40235	68.36	597	183	0.31	52669	89.49	644	46	0.08	57339	97.42
551	380	0.65	40615	69.01	598	148	0.25	52817	89.74	645	37	0.06	57376	97.49
552	340	0.58	40955	69.59	599	178	0.30	52995	90.04	646	38	0.06	57414	97.55
553	364	0.62	41319	70.20	600	157	0.27	53152	90.31	647	38	0.06	57452	97.61
554	339	0.58	41658	70.78	601	136	0.23	53288	90.54	648	33	0.06	57485	97.67
555	353	0.60	42011	71.38	602	151	0.26	53439	90.80	649	36	0.06	57521	97.73
556	351	0.60	42362	71.98	603	131	0.22	53570	91.02	650	44	0.07	57565	97.81
557	325	0.55	42687	72.53	604	150	0.25	53720	91.27	651	33	0.06	57598	97.86
558	341	0.58	43028	73.11	605	136	0.23	53856	91.50	652	32	0.05	57630	97.92
559	329	0.56	43357	73.67	606	148	0.25	54004	91.76	653	88	0.15	57718	98.07
560	305	0.52	43662	74.18	607	134	0.23	54138	91.98	654	48	0.08	57766	98.15
561	351	0.60	44013	74.78	608	128	0.22	54266	92.20	655	30	0.05	57796	98.20
562	356	0.60	44369	75.39	609	150	0.25	54416	92.46	656	25	0.04	57821	98.24
563	303	0.51	44672	75.90	610	114	0.19	54530	92.65	657	18	0.03	57839	98.27
564	300	0.51	44972	76.41	611	150	0.25	54680	92.90	658	23	0.04	57862	98.31
565	282	0.48	45254	76.89	612	136	0.23	54816	93.14	659	25	0.04	57887	98.35
566	312	0.53	45566	77.42	613	116	0.20	54932	93.33	660	24	0.04	57911	98.39
567	315	0.54	45881	77.95	614	106	0.18	55038	93.51	661	13	0.02	57924	98.42
568	264	0.45	46145	78.40	615	112	0.19	55150	93.70	662	21	0.04	57945	98.45
569	281	0.48	46426	78.88	616	124	0.21	55274	93.91	663	33	0.06	57978	98.51
570	295	0.50	46721	79.38	617	125	0.21	55399	94.13	664	25	0.04	58003	98.55
571	265	0.45	46986	79.83	618	100	0.17	55499	94.30	665	19	0.03	58022	98.58
572	274	0.47	47260	80.30	619	99	0.17	55598	94.46	666	25	0.04	58047	98.63
573	272	0.46	47532	80.76	620	100	0.17	55698	94.63	667	19	0.03	58066	98.66
574	241	0.41	47773	81.17	621	94	0.16	55792	94.79	668	53	0.09	58119	98.75
575	259	0.44	48032	81.61	622	93	0.16	55885	94.95	669	20	0.03	58139	98.78
576	241	0.41	48273	82.02	623	84	0.14	55969	95.09	670	24	0.04	58163	98.82
577	242	0.41	48515	82.43	624	76	0.13	56045	95.22	671	10	0.02	58173	98.84
578	249	0.42	48764	82.85	625	67	0.11	56112	95.34	672	11	0.02	58184	98.86
579	230	0.39	48994	83.24	626	85	0.14	56197	95.48	673	14	0.02	58198	98.88
580	251	0.43	49245	83.67	627	90	0.15	56287	95.64	674	16	0.03	58214	98.91
581	238	0.40	49483	84.07	628	84	0.14	56371	95.78	675	10	0.02	58224	98.93
582	234	0.40	49717	84.47	629	104	0.18	56475	95.95	676	23	0.04	58247	98.97
583	238	0.40	49955	84.88	630	80	0.14	56555	96.09	677	13	0.02	58260	98.99
584	222	0.38	50177	85.25	631	62	0.11	56617	96.20	678	10	0.02	58270	99.00
585	220	0.37	50397	85.63	632	50	0.08	56667	96.28	679	20	0.03	58290	99.04
586	209	0.36	50606	85.98	633	65	0.11	56732	96.39	680	20	0.03	58310	99.07
587	210	0.36	50816	86.34	634	65	0.11	56797	96.50	681	27	0.05	58337	99.12
588	208	0.35	51024	86.69	635	55	0.09	56852	96.60	682	21	0.04	58358	99.15
589	181	0.31	51205	87.00	636	50	0.08	56902	96.68	683	12	0.02	58370	99.17
590	184	0.31	51389	87.31	637	72	0.12	56974	96.80	684	8	0.01	58378	99.19
591	189	0.32	51578	87.63	638	47	0.08	57021	96.88	685	15	0.03	58393	99.21

**Table 174. Writing Grade 6 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
686	9	0.02	58402	99.23	738	2	0.00	58760	99.84
687	15	0.03	58417	99.25	739	8	0.01	58768	99.85
688	10	0.02	58427	99.27	740	3	0.01	58771	99.86
689	15	0.03	58442	99.30	744	2	0.00	58773	99.86
690	6	0.01	58448	99.31	746	1	0.00	58774	99.86
691	7	0.01	58455	99.32	747	2	0.00	58776	99.86
692	8	0.01	58463	99.33	750	3	0.01	58779	99.87
693	7	0.01	58470	99.34	752	3	0.01	58782	99.87
694	7	0.01	58477	99.36	753	1	0.00	58783	99.88
695	16	0.03	58493	99.38	756	1	0.00	58784	99.88
696	2	0.00	58495	99.39	757	2	0.00	58786	99.88
697	13	0.02	58508	99.41	758	2	0.00	58788	99.88
698	11	0.02	58519	99.43	759	1	0.00	58789	99.89
699	6	0.01	58525	99.44	769	2	0.00	58791	99.89
700	4	0.01	58529	99.44	774	5	0.01	58796	99.90
701	12	0.02	58541	99.46	775	4	0.01	58800	99.90
702	22	0.04	58563	99.50	776	2	0.00	58802	99.91
703	9	0.02	58572	99.52	778	6	0.01	58808	99.92
704	21	0.04	58593	99.55	783	3	0.01	58811	99.92
705	8	0.01	58601	99.57	784	6	0.01	58817	99.93
706	5	0.01	58606	99.58	801	18	0.03	58835	99.96
707	2	0.00	58608	99.58	805	1	0.00	58836	99.97
708	2	0.00	58610	99.58	811	4	0.01	58840	99.97
709	3	0.01	58613	99.59	840	16	0.03	58856	100
710	9	0.02	58622	99.60					
711	13	0.02	58635	99.62					
712	11	0.02	58646	99.64					
713	7	0.01	58653	99.66					
714	4	0.01	58657	99.66					
715	10	0.02	58667	99.68					
716	3	0.01	58670	99.68					
717	2	0.00	58672	99.69					
718	1	0.00	58673	99.69					
721	2	0.00	58675	99.69					
723	5	0.01	58680	99.70					
724	12	0.02	58692	99.72					
725	4	0.01	58696	99.73					
726	3	0.01	58699	99.73					
727	4	0.01	58703	99.74					
728	4	0.01	58707	99.75					
729	2	0.00	58709	99.75					
730	3	0.01	58712	99.76					
731	1	0.00	58713	99.76					
734	22	0.04	58735	99.79					
735	4	0.01	58739	99.80					
736	17	0.03	58756	99.83					
737	2	0.00	58758	99.83					

**Table 175. Mathematics Grade 6 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
240	140	0.24	140	0.24	288	1	0.00	296	0.50	335	13	0.02	711	1.21
241	3	0.01	143	0.24	289	4	0.01	300	0.51	336	13	0.02	724	1.23
242	2	0.00	145	0.25	290	5	0.01	305	0.52	337	12	0.02	736	1.25
243	3	0.01	148	0.25	291	4	0.01	309	0.52	338	11	0.02	747	1.27
244	4	0.01	152	0.26	292	8	0.01	317	0.54	339	8	0.01	755	1.28
245	2	0.00	154	0.26	293	7	0.01	324	0.55	340	14	0.02	769	1.31
246	1	0.00	155	0.26	294	6	0.01	330	0.56	341	10	0.02	779	1.32
247	3	0.01	158	0.27	295	8	0.01	338	0.57	342	12	0.02	791	1.34
248	2	0.00	160	0.27	296	7	0.01	345	0.59	343	14	0.02	805	1.37
249	3	0.01	163	0.28	297	5	0.01	350	0.59	344	7	0.01	812	1.38
250	3	0.01	166	0.28	298	1	0.00	351	0.60	345	12	0.02	824	1.40
251	1	0.00	167	0.28	299	9	0.02	360	0.61	346	10	0.02	834	1.42
252	2	0.00	169	0.29	300	7	0.01	367	0.62	347	12	0.02	846	1.44
253	1	0.00	170	0.29	301	9	0.02	376	0.64	348	24	0.04	870	1.48
254	2	0.00	172	0.29	302	4	0.01	380	0.65	349	18	0.03	888	1.51
255	2	0.00	174	0.30	303	9	0.02	389	0.66	350	14	0.02	902	1.53
256	6	0.01	180	0.31	304	10	0.02	399	0.68	351	16	0.03	918	1.56
257	3	0.01	183	0.31	305	13	0.02	412	0.70	352	12	0.02	930	1.58
258	1	0.00	184	0.31	306	5	0.01	417	0.71	353	19	0.03	949	1.61
260	2	0.00	186	0.32	307	10	0.02	427	0.72	354	22	0.04	971	1.65
261	5	0.01	191	0.32	308	11	0.02	438	0.74	355	15	0.03	986	1.67
262	4	0.01	195	0.33	309	6	0.01	444	0.75	356	22	0.04	1008	1.71
263	2	0.00	197	0.33	310	14	0.02	458	0.78	357	22	0.04	1030	1.75
264	2	0.00	199	0.34	311	9	0.02	467	0.79	358	30	0.05	1060	1.80
265	3	0.01	202	0.34	312	4	0.01	471	0.80	359	18	0.03	1078	1.83
266	1	0.00	203	0.34	313	9	0.02	480	0.81	360	20	0.03	1098	1.86
267	2	0.00	205	0.35	314	4	0.01	484	0.82	361	26	0.04	1124	1.91
268	3	0.01	208	0.35	315	10	0.02	494	0.84	362	26	0.04	1150	1.95
269	6	0.01	214	0.36	316	9	0.02	503	0.85	363	23	0.04	1173	1.99
270	2	0.00	216	0.37	317	12	0.02	515	0.87	364	21	0.04	1194	2.03
271	2	0.00	218	0.37	318	3	0.01	518	0.88	365	23	0.04	1217	2.07
272	6	0.01	224	0.38	319	14	0.02	532	0.90	366	30	0.05	1247	2.12
273	2	0.00	226	0.38	320	14	0.02	546	0.93	367	25	0.04	1272	2.16
274	2	0.00	228	0.39	321	8	0.01	554	0.94	368	20	0.03	1292	2.19
275	6	0.01	234	0.40	322	7	0.01	561	0.95	369	28	0.05	1320	2.24
276	5	0.01	239	0.41	323	9	0.02	570	0.97	370	27	0.05	1347	2.29
277	7	0.01	246	0.42	324	12	0.02	582	0.99	371	25	0.04	1372	2.33
278	4	0.01	250	0.42	325	15	0.03	597	1.01	372	35	0.06	1407	2.39
279	5	0.01	255	0.43	326	5	0.01	602	1.02	373	26	0.04	1433	2.43
280	3	0.01	258	0.44	327	8	0.01	610	1.04	374	17	0.03	1450	2.46
281	5	0.01	263	0.45	328	7	0.01	617	1.05	375	24	0.04	1474	2.50
282	6	0.01	269	0.46	329	14	0.02	631	1.07	376	35	0.06	1509	2.56
283	9	0.02	278	0.47	330	14	0.02	645	1.10	377	33	0.06	1542	2.62
284	3	0.01	281	0.48	331	12	0.02	657	1.12	378	40	0.07	1582	2.69
285	6	0.01	287	0.49	332	12	0.02	669	1.14	379	29	0.05	1611	2.73
286	6	0.01	293	0.50	333	14	0.02	683	1.16	380	37	0.06	1648	2.80
287	2	0.00	295	0.50	334	15	0.03	698	1.18	381	38	0.06	1686	2.86

**Table 175. Mathematics Grade 6 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
382	28	0.05	1714	2.91	429	96	0.16	4558	7.74	476	199	0.34	11307	19.20
383	28	0.05	1742	2.96	430	88	0.15	4646	7.89	477	184	0.31	11491	19.51
384	30	0.05	1772	3.01	431	97	0.16	4743	8.05	478	210	0.36	11701	19.86
385	44	0.07	1816	3.08	432	92	0.16	4835	8.21	479	216	0.37	11917	20.23
386	35	0.06	1851	3.14	433	115	0.20	4950	8.40	480	219	0.37	12136	20.60
387	40	0.07	1891	3.21	434	96	0.16	5046	8.57	481	229	0.39	12365	20.99
388	41	0.07	1932	3.28	435	107	0.18	5153	8.75	482	204	0.35	12569	21.34
389	59	0.10	1991	3.38	436	99	0.17	5252	8.92	483	229	0.39	12798	21.73
390	36	0.06	2027	3.44	437	107	0.18	5359	9.10	484	224	0.38	13022	22.11
391	50	0.08	2077	3.53	438	111	0.19	5470	9.29	485	258	0.44	13280	22.55
392	45	0.08	2122	3.60	439	88	0.15	5558	9.44	486	254	0.43	13534	22.98
393	35	0.06	2157	3.66	440	102	0.17	5660	9.61	487	223	0.38	13757	23.35
394	37	0.06	2194	3.72	441	123	0.21	5783	9.82	488	220	0.37	13977	23.73
395	44	0.07	2238	3.80	442	121	0.21	5904	10.02	489	227	0.39	14204	24.11
396	56	0.10	2294	3.89	443	133	0.23	6037	10.25	490	234	0.40	14438	24.51
397	52	0.09	2346	3.98	444	153	0.26	6190	10.51	491	229	0.39	14667	24.90
398	47	0.08	2393	4.06	445	127	0.22	6317	10.72	492	271	0.46	14938	25.36
399	50	0.08	2443	4.15	446	120	0.20	6437	10.93	493	237	0.40	15175	25.76
400	66	0.11	2509	4.26	447	117	0.20	6554	11.13	494	259	0.44	15434	26.20
401	59	0.10	2568	4.36	448	141	0.24	6695	11.37	495	280	0.48	15714	26.68
402	51	0.09	2619	4.45	449	117	0.20	6812	11.56	496	238	0.40	15952	27.08
403	61	0.10	2680	4.55	450	141	0.24	6953	11.80	497	259	0.44	16211	27.52
404	68	0.12	2748	4.67	451	150	0.25	7103	12.06	498	236	0.40	16447	27.92
405	58	0.10	2806	4.76	452	138	0.23	7241	12.29	499	249	0.42	16696	28.34
406	57	0.10	2863	4.86	453	143	0.24	7384	12.54	500	242	0.41	16938	28.76
407	61	0.10	2924	4.96	454	140	0.24	7524	12.77	501	240	0.41	17178	29.16
408	57	0.10	2981	5.06	455	156	0.26	7680	13.04	502	283	0.48	17461	29.64
409	57	0.10	3038	5.16	456	135	0.23	7815	13.27	503	267	0.45	17728	30.10
410	68	0.12	3106	5.27	457	164	0.28	7979	13.55	504	276	0.47	18004	30.56
411	55	0.09	3161	5.37	458	128	0.22	8107	13.76	505	304	0.52	18308	31.08
412	70	0.12	3231	5.49	459	139	0.24	8246	14.00	506	304	0.52	18612	31.60
413	52	0.09	3283	5.57	460	160	0.27	8406	14.27	507	318	0.54	18930	32.14
414	65	0.11	3348	5.68	461	166	0.28	8572	14.55	508	300	0.51	19230	32.65
415	78	0.13	3426	5.82	462	183	0.31	8755	14.86	509	275	0.47	19505	33.11
416	57	0.10	3483	5.91	463	160	0.27	8915	15.13	510	258	0.44	19763	33.55
417	80	0.14	3563	6.05	464	166	0.28	9081	15.42	511	290	0.49	20053	34.04
418	74	0.13	3637	6.17	465	146	0.25	9227	15.66	512	295	0.50	20348	34.54
419	58	0.10	3695	6.27	466	160	0.27	9387	15.94	513	298	0.51	20646	35.05
420	73	0.12	3768	6.40	467	191	0.32	9578	16.26	514	311	0.53	20957	35.58
421	79	0.13	3847	6.53	468	170	0.29	9748	16.55	515	275	0.47	21232	36.05
422	92	0.16	3939	6.69	469	193	0.33	9941	16.88	516	304	0.52	21536	36.56
423	71	0.12	4010	6.81	470	177	0.30	10118	17.18	517	299	0.51	21835	37.07
424	86	0.15	4096	6.95	471	204	0.35	10322	17.52	518	281	0.48	22116	37.55
425	83	0.14	4179	7.09	472	200	0.34	10522	17.86	519	307	0.52	22423	38.07
426	97	0.16	4276	7.26	473	209	0.35	10731	18.22	520	301	0.51	22724	38.58
427	87	0.15	4363	7.41	474	168	0.29	10899	18.50	521	308	0.52	23032	39.10
428	99	0.17	4462	7.58	475	209	0.35	11108	18.86	522	310	0.53	23342	39.63

**Table 175. Mathematics Grade 6 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
523	335	0.57	23677	40.20	570	312	0.53	38932	66.09	617	198	0.34	51148	86.83
524	276	0.47	23953	40.66	571	315	0.53	39247	66.63	618	174	0.30	51322	87.13
525	330	0.56	24283	41.22	572	309	0.52	39556	67.15	619	177	0.30	51499	87.43
526	310	0.53	24593	41.75	573	336	0.57	39892	67.72	620	197	0.33	51696	87.76
527	322	0.55	24915	42.30	574	295	0.50	40187	68.22	621	195	0.33	51891	88.09
528	356	0.60	25271	42.90	575	308	0.52	40495	68.75	622	200	0.34	52091	88.43
529	322	0.55	25593	43.45	576	315	0.53	40810	69.28	623	173	0.29	52264	88.73
530	335	0.57	25928	44.02	577	303	0.51	41113	69.80	624	178	0.30	52442	89.03
531	328	0.56	26256	44.57	578	297	0.50	41410	70.30	625	173	0.29	52615	89.32
532	334	0.57	26590	45.14	579	297	0.50	41707	70.81	626	166	0.28	52781	89.61
533	319	0.54	26909	45.68	580	248	0.42	41955	71.23	627	153	0.26	52934	89.86
534	329	0.56	27238	46.24	581	292	0.50	42247	71.72	628	170	0.29	53104	90.15
535	327	0.56	27565	46.80	582	266	0.45	42513	72.17	629	181	0.31	53285	90.46
536	345	0.59	27910	47.38	583	273	0.46	42786	72.64	630	163	0.28	53448	90.74
537	362	0.61	28272	48.00	584	268	0.45	43054	73.09	631	144	0.24	53592	90.98
538	291	0.49	28563	48.49	585	283	0.48	43337	73.57	632	159	0.27	53751	91.25
539	328	0.56	28891	49.05	586	282	0.48	43619	74.05	633	146	0.25	53897	91.50
540	325	0.55	29216	49.60	587	283	0.48	43902	74.53	634	160	0.27	54057	91.77
541	347	0.59	29563	50.19	588	264	0.45	44166	74.98	635	147	0.25	54204	92.02
542	326	0.55	29889	50.74	589	254	0.43	44420	75.41	636	137	0.23	54341	92.25
543	318	0.54	30207	51.28	590	268	0.45	44688	75.87	637	143	0.24	54484	92.50
544	327	0.56	30534	51.84	591	299	0.51	44987	76.37	638	126	0.21	54610	92.71
545	343	0.58	30877	52.42	592	277	0.47	45264	76.84	639	142	0.24	54752	92.95
546	324	0.55	31201	52.97	593	254	0.43	45518	77.27	640	129	0.22	54881	93.17
547	358	0.61	31559	53.58	594	255	0.43	45773	77.71	641	134	0.23	55015	93.40
548	315	0.53	31874	54.11	595	252	0.43	46025	78.14	642	118	0.20	55133	93.60
549	306	0.52	32180	54.63	596	262	0.44	46287	78.58	643	118	0.20	55251	93.80
550	307	0.52	32487	55.15	597	259	0.44	46546	79.02	644	99	0.17	55350	93.97
551	334	0.57	32821	55.72	598	250	0.42	46796	79.44	645	114	0.19	55464	94.16
552	323	0.55	33144	56.27	599	270	0.46	47066	79.90	646	102	0.17	55566	94.33
553	336	0.57	33480	56.84	600	236	0.40	47302	80.30	647	88	0.15	55654	94.48
554	293	0.50	33773	57.34	601	209	0.35	47511	80.66	648	119	0.20	55773	94.68
555	333	0.57	34106	57.90	602	254	0.43	47765	81.09	649	96	0.16	55869	94.85
556	309	0.52	34415	58.43	603	277	0.47	48042	81.56	650	104	0.18	55973	95.02
557	316	0.54	34731	58.96	604	224	0.38	48266	81.94	651	100	0.17	56073	95.19
558	330	0.56	35061	59.52	605	246	0.42	48512	82.36	652	95	0.16	56168	95.36
559	351	0.60	35412	60.12	606	261	0.44	48773	82.80	653	105	0.18	56273	95.53
560	327	0.56	35739	60.67	607	236	0.40	49009	83.20	654	84	0.14	56357	95.68
561	328	0.56	36067	61.23	608	212	0.36	49221	83.56	655	75	0.13	56432	95.80
562	303	0.51	36370	61.74	609	251	0.43	49472	83.99	656	97	0.16	56529	95.97
563	312	0.53	36682	62.27	610	216	0.37	49688	84.35	657	84	0.14	56613	96.11
564	320	0.54	37002	62.82	611	210	0.36	49898	84.71	658	94	0.16	56707	96.27
565	310	0.53	37312	63.34	612	197	0.33	50095	85.05	659	70	0.12	56777	96.39
566	334	0.57	37646	63.91	613	221	0.38	50316	85.42	660	67	0.11	56844	96.50
567	329	0.56	37975	64.47	614	190	0.32	50506	85.74	661	74	0.13	56918	96.63
568	312	0.53	38287	65.00	615	225	0.38	50731	86.12	662	64	0.11	56982	96.74
569	333	0.57	38620	65.56	616	219	0.37	50950	86.50	663	69	0.12	57051	96.85

**Table 175. Mathematics Grade 6 Scale Score Distribution (continued)**

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
664	81	0.14	57132	96.99	711	6	0.01	58624	99.52	764	2	0.00	58868	99.94
665	65	0.11	57197	97.10	712	11	0.02	58635	99.54	768	4	0.01	58872	99.95
666	57	0.10	57254	97.20	713	6	0.01	58641	99.55	773	1	0.00	58873	99.95
667	79	0.13	57333	97.33	714	5	0.01	58646	99.56	776	2	0.00	58875	99.95
668	58	0.10	57391	97.43	715	7	0.01	58653	99.57	777	1	0.00	58876	99.95
669	53	0.09	57444	97.52	716	23	0.04	58676	99.61	781	3	0.01	58879	99.96
670	60	0.10	57504	97.62	717	15	0.03	58691	99.64	785	2	0.00	58881	99.96
671	54	0.09	57558	97.71	718	6	0.01	58697	99.65	808	7	0.01	58888	99.97
672	51	0.09	57609	97.80	719	9	0.02	58706	99.66	810	8	0.01	58896	99.99
673	59	0.10	57668	97.90	720	9	0.02	58715	99.68	811	1	0.00	58897	99.99
674	57	0.10	57725	98.00	721	3	0.01	58718	99.68	812	3	0.01	58900	99.99
675	47	0.08	57772	98.08	722	8	0.01	58726	99.70	830	4	0.01	58904	100.00
676	36	0.06	57808	98.14	723	2	0.00	58728	99.70					
677	57	0.10	57865	98.24	724	5	0.01	58733	99.71					
678	35	0.06	57900	98.30	725	6	0.01	58739	99.72					
679	37	0.06	57937	98.36	726	6	0.01	58745	99.73					
680	41	0.07	57978	98.43	727	4	0.01	58749	99.74					
681	36	0.06	58014	98.49	728	3	0.01	58752	99.74					
682	43	0.07	58057	98.56	729	4	0.01	58756	99.75					
683	27	0.05	58084	98.61	730	4	0.01	58760	99.76					
684	28	0.05	58112	98.66	731	1	0.00	58761	99.76					
685	33	0.06	58145	98.71	732	5	0.01	58766	99.77					
686	28	0.05	58173	98.76	733	8	0.01	58774	99.78					
687	27	0.05	58200	98.80	734	4	0.01	58778	99.79					
688	29	0.05	58229	98.85	735	15	0.03	58793	99.81					
689	25	0.04	58254	98.90	736	5	0.01	58798	99.82					
690	30	0.05	58284	98.95	737	3	0.01	58801	99.83					
691	29	0.05	58313	99.00	738	3	0.01	58804	99.83					
692	23	0.04	58336	99.04	739	3	0.01	58807	99.84					
693	13	0.02	58349	99.06	740	5	0.01	58812	99.84					
694	17	0.03	58366	99.09	742	1	0.00	58813	99.85					
695	25	0.04	58391	99.13	743	7	0.01	58820	99.86					
696	14	0.02	58405	99.15	745	2	0.00	58822	99.86					
697	17	0.03	58422	99.18	747	4	0.01	58826	99.87					
698	26	0.04	58448	99.23	748	2	0.00	58828	99.87					
699	20	0.03	58468	99.26	749	2	0.00	58830	99.87					
700	17	0.03	58485	99.29	751	1	0.00	58831	99.88					
701	11	0.02	58496	99.31	752	1	0.00	58832	99.88					
702	17	0.03	58513	99.34	753	1	0.00	58833	99.88					
703	18	0.03	58531	99.37	754	1	0.00	58834	99.88					
704	16	0.03	58547	99.39	755	2	0.00	58836	99.88					
705	8	0.01	58555	99.41	756	1	0.00	58837	99.89					
706	11	0.02	58566	99.43	759	15	0.03	58852	99.91					
707	13	0.02	58579	99.45	760	3	0.01	58855	99.92					
708	9	0.02	58588	99.46	761	4	0.01	58859	99.92					
709	15	0.03	58603	99.49	762	3	0.01	58862	99.93					
710	15	0.03	58618	99.51	763	4	0.01	58866	99.94					

**Table 176. Reading Grade 7 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
300	208	0.36	208	0.36	381	1	0.00	290	0.50	433	4	0.01	480	0.83
304	1	0.00	209	0.36	382	3	0.01	293	0.51	434	6	0.01	486	0.84
306	1	0.00	210	0.36	383	4	0.01	297	0.51	435	2	0.00	488	0.84
315	1	0.00	211	0.37	384	2	0.00	299	0.52	436	4	0.01	492	0.85
316	1	0.00	212	0.37	386	5	0.01	304	0.53	437	4	0.01	496	0.86
320	1	0.00	213	0.37	387	5	0.01	309	0.53	438	3	0.01	499	0.86
322	2	0.00	215	0.37	388	3	0.01	312	0.54	439	2	0.00	501	0.87
323	2	0.00	217	0.38	389	2	0.00	314	0.54	440	6	0.01	507	0.88
326	1	0.00	218	0.38	392	3	0.01	317	0.55	441	12	0.02	519	0.90
331	2	0.00	220	0.38	393	2	0.00	319	0.55	442	8	0.01	527	0.91
334	2	0.00	222	0.38	394	3	0.01	322	0.56	443	6	0.01	533	0.92
335	1	0.00	223	0.39	395	1	0.00	323	0.56	444	10	0.02	543	0.94
338	2	0.00	225	0.39	396	4	0.01	327	0.57	445	10	0.02	553	0.96
341	1	0.00	226	0.39	397	5	0.01	332	0.57	446	12	0.02	565	0.98
343	1	0.00	227	0.39	398	5	0.01	337	0.58	447	10	0.02	575	1.00
344	2	0.00	229	0.40	400	2	0.00	339	0.59	448	13	0.02	588	1.02
345	1	0.00	230	0.40	401	2	0.00	341	0.59	449	9	0.02	597	1.03
346	1	0.00	231	0.40	402	3	0.01	344	0.60	450	13	0.02	610	1.06
348	1	0.00	232	0.40	403	3	0.01	347	0.60	451	5	0.01	615	1.06
350	2	0.00	234	0.41	404	3	0.01	350	0.61	452	9	0.02	624	1.08
351	5	0.01	239	0.41	405	6	0.01	356	0.62	453	12	0.02	636	1.10
352	1	0.00	240	0.42	406	4	0.01	360	0.62	454	12	0.02	648	1.12
353	1	0.00	241	0.42	407	4	0.01	364	0.63	455	8	0.01	656	1.14
354	1	0.00	242	0.42	408	4	0.01	368	0.64	456	11	0.02	667	1.15
355	4	0.01	246	0.43	409	3	0.01	371	0.64	457	10	0.02	677	1.17
356	3	0.01	249	0.43	411	5	0.01	376	0.65	458	12	0.02	689	1.19
357	2	0.00	251	0.43	412	2	0.00	378	0.65	459	9	0.02	698	1.21
358	1	0.00	252	0.44	413	1	0.00	379	0.66	460	14	0.02	712	1.23
359	2	0.00	254	0.44	414	6	0.01	385	0.67	461	9	0.02	721	1.25
360	1	0.00	255	0.44	415	7	0.01	392	0.68	462	12	0.02	733	1.27
361	2	0.00	257	0.44	416	4	0.01	396	0.69	463	10	0.02	743	1.29
362	2	0.00	259	0.45	417	1	0.00	397	0.69	464	9	0.02	752	1.30
363	1	0.00	260	0.45	418	2	0.00	399	0.69	465	11	0.02	763	1.32
364	4	0.01	264	0.46	419	1	0.00	400	0.69	466	20	0.03	783	1.36
365	1	0.00	265	0.46	420	2	0.00	402	0.70	467	6	0.01	789	1.37
367	2	0.00	267	0.46	421	6	0.01	408	0.71	468	13	0.02	802	1.39
368	1	0.00	268	0.46	422	4	0.01	412	0.71	469	11	0.02	813	1.41
369	2	0.00	270	0.47	423	6	0.01	418	0.72	470	14	0.02	827	1.43
370	4	0.01	274	0.47	424	5	0.01	423	0.73	471	21	0.04	848	1.47
372	1	0.00	275	0.48	425	6	0.01	429	0.74	472	20	0.03	868	1.50
373	1	0.00	276	0.48	426	12	0.02	441	0.76	473	17	0.03	885	1.53
374	4	0.01	280	0.48	427	4	0.01	445	0.77	474	15	0.03	900	1.56
375	1	0.00	281	0.49	428	6	0.01	451	0.78	475	19	0.03	919	1.59
376	2	0.00	283	0.49	429	12	0.02	463	0.80	476	17	0.03	936	1.62
377	3	0.01	286	0.50	430	5	0.01	468	0.81	477	19	0.03	955	1.65
379	1	0.00	287	0.50	431	7	0.01	475	0.82	478	24	0.04	979	1.69
380	2	0.00	289	0.50	432	1	0.00	476	0.82	479	17	0.03	996	1.72

**Table 176. Reading Grade 7 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
480	22	0.04	1018	1.76	527	60	0.10	2821	4.88	574	174	0.30	7459	12.91
481	20	0.03	1038	1.80	528	58	0.10	2879	4.98	575	136	0.24	7595	13.15
482	23	0.04	1061	1.84	529	48	0.08	2927	5.07	576	147	0.25	7742	13.40
483	25	0.04	1086	1.88	530	51	0.09	2978	5.16	577	142	0.25	7884	13.65
484	33	0.06	1119	1.94	531	63	0.11	3041	5.26	578	184	0.32	8068	13.97
485	25	0.04	1144	1.98	532	55	0.10	3096	5.36	579	171	0.30	8239	14.26
486	26	0.05	1170	2.03	533	69	0.12	3165	5.48	580	169	0.29	8408	14.56
487	32	0.06	1202	2.08	534	64	0.11	3229	5.59	581	166	0.29	8574	14.84
488	24	0.04	1226	2.12	535	76	0.13	3305	5.72	582	171	0.30	8745	15.14
489	34	0.06	1260	2.18	536	78	0.14	3383	5.86	583	183	0.32	8928	15.46
490	36	0.06	1296	2.24	537	71	0.12	3454	5.98	584	184	0.32	9112	15.77
491	21	0.04	1317	2.28	538	72	0.12	3526	6.10	585	195	0.34	9307	16.11
492	26	0.05	1343	2.32	539	75	0.13	3601	6.23	586	169	0.29	9476	16.40
493	36	0.06	1379	2.39	540	78	0.14	3679	6.37	587	191	0.33	9667	16.73
494	33	0.06	1412	2.44	541	76	0.13	3755	6.50	588	195	0.34	9862	17.07
495	32	0.06	1444	2.50	542	61	0.11	3816	6.61	589	202	0.35	10064	17.42
496	31	0.05	1475	2.55	543	85	0.15	3901	6.75	590	227	0.39	10291	17.81
497	38	0.07	1513	2.62	544	71	0.12	3972	6.88	591	199	0.34	10490	18.16
498	30	0.05	1543	2.67	545	79	0.14	4051	7.01	592	201	0.35	10691	18.51
499	22	0.04	1565	2.71	546	87	0.15	4138	7.16	593	210	0.36	10901	18.87
500	32	0.06	1597	2.76	547	82	0.14	4220	7.31	594	250	0.43	11151	19.30
501	37	0.06	1634	2.83	548	78	0.14	4298	7.44	595	254	0.44	11405	19.74
502	50	0.09	1684	2.92	549	93	0.16	4391	7.60	596	228	0.39	11633	20.14
503	34	0.06	1718	2.97	550	80	0.14	4471	7.74	597	238	0.41	11871	20.55
504	36	0.06	1754	3.04	551	94	0.16	4565	7.90	598	253	0.44	12124	20.99
505	51	0.09	1805	3.12	552	95	0.16	4660	8.07	599	242	0.42	12366	21.41
506	41	0.07	1846	3.20	553	92	0.16	4752	8.23	600	262	0.45	12628	21.86
507	42	0.07	1888	3.27	554	107	0.19	4859	8.41	601	233	0.40	12861	22.26
508	32	0.06	1920	3.32	555	91	0.16	4950	8.57	602	241	0.42	13102	22.68
509	40	0.07	1960	3.39	556	108	0.19	5058	8.76	603	234	0.41	13336	23.09
510	44	0.08	2004	3.47	557	106	0.18	5164	8.94	604	244	0.42	13580	23.51
511	50	0.09	2054	3.56	558	140	0.24	5304	9.18	605	269	0.47	13849	23.97
512	38	0.07	2092	3.62	559	128	0.22	5432	9.40	606	262	0.45	14111	24.43
513	50	0.09	2142	3.71	560	113	0.20	5545	9.60	607	289	0.50	14400	24.93
514	34	0.06	2176	3.77	561	99	0.17	5644	9.77	608	314	0.54	14714	25.47
515	41	0.07	2217	3.84	562	138	0.24	5782	10.01	609	279	0.48	14993	25.95
516	44	0.08	2261	3.91	563	125	0.22	5907	10.23	610	285	0.49	15278	26.45
517	41	0.07	2302	3.99	564	122	0.21	6029	10.44	611	293	0.51	15571	26.96
518	41	0.07	2343	4.06	565	128	0.22	6157	10.66	612	312	0.54	15883	27.50
519	40	0.07	2383	4.13	566	128	0.22	6285	10.88	613	318	0.55	16201	28.05
520	52	0.09	2435	4.22	567	131	0.23	6416	11.11	614	298	0.52	16499	28.56
521	59	0.10	2494	4.32	568	143	0.25	6559	11.35	615	309	0.53	16808	29.10
522	57	0.10	2551	4.42	569	148	0.26	6707	11.61	616	325	0.56	17133	29.66
523	57	0.10	2608	4.51	570	123	0.21	6830	11.82	617	326	0.56	17459	30.22
524	48	0.08	2656	4.60	571	155	0.27	6985	12.09	618	319	0.55	17778	30.78
525	48	0.08	2704	4.68	572	143	0.25	7128	12.34	619	304	0.53	18082	31.30
526	57	0.10	2761	4.78	573	157	0.27	7285	12.61	620	326	0.56	18408	31.87



**Table 176. Reading Grade 7 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
621	299	0.52	18707	32.38	668	406	0.70	37589	65.07	715	192	0.33	52413	90.73
622	341	0.59	19048	32.97	669	385	0.67	37974	65.74	716	228	0.39	52641	91.13
623	361	0.62	19409	33.60	670	405	0.70	38379	66.44	717	197	0.34	52838	91.47
624	342	0.59	19751	34.19	671	418	0.72	38797	67.16	718	187	0.32	53025	91.79
625	357	0.62	20108	34.81	672	407	0.70	39204	67.87	719	160	0.28	53185	92.07
626	352	0.61	20460	35.42	673	397	0.69	39601	68.55	720	184	0.32	53369	92.39
627	338	0.59	20798	36.00	674	432	0.75	40033	69.30	721	182	0.32	53551	92.70
628	394	0.68	21192	36.69	675	379	0.66	40412	69.96	722	162	0.28	53713	92.98
629	388	0.67	21580	37.36	676	362	0.63	40774	70.58	723	150	0.26	53863	93.24
630	360	0.62	21940	37.98	677	405	0.70	41179	71.29	724	163	0.28	54026	93.53
631	390	0.68	22330	38.66	678	372	0.64	41551	71.93	725	147	0.25	54173	93.78
632	407	0.70	22737	39.36	679	346	0.60	41897	72.53	726	163	0.28	54336	94.06
633	398	0.69	23135	40.05	680	373	0.65	42270	73.17	727	151	0.26	54487	94.32
634	401	0.69	23536	40.74	681	352	0.61	42622	73.78	728	115	0.20	54602	94.52
635	404	0.70	23940	41.44	682	379	0.66	43001	74.44	729	116	0.20	54718	94.72
636	375	0.65	24315	42.09	683	362	0.63	43363	75.07	730	148	0.26	54866	94.98
637	382	0.66	24697	42.75	684	368	0.64	43731	75.70	731	130	0.23	54996	95.20
638	417	0.72	25114	43.48	685	339	0.59	44070	76.29	732	102	0.18	55098	95.38
639	440	0.76	25554	44.24	686	349	0.60	44419	76.89	733	110	0.19	55208	95.57
640	419	0.73	25973	44.96	687	352	0.61	44771	77.50	734	125	0.22	55333	95.79
641	426	0.74	26399	45.70	688	333	0.58	45104	78.08	735	132	0.23	55465	96.02
642	385	0.67	26784	46.37	689	323	0.56	45427	78.64	736	112	0.19	55577	96.21
643	393	0.68	27177	47.05	690	347	0.60	45774	79.24	737	111	0.19	55688	96.40
644	400	0.69	27577	47.74	691	334	0.58	46108	79.82	738	117	0.20	55805	96.61
645	424	0.73	28001	48.47	692	296	0.51	46404	80.33	739	94	0.16	55899	96.77
646	370	0.64	28371	49.11	693	306	0.53	46710	80.86	740	90	0.16	55989	96.92
647	392	0.68	28763	49.79	694	337	0.58	47047	81.44	741	76	0.13	56065	97.06
648	436	0.75	29199	50.55	695	277	0.48	47324	81.92	742	68	0.12	56133	97.17
649	385	0.67	29584	51.21	696	290	0.50	47614	82.43	743	94	0.16	56227	97.34
650	422	0.73	30006	51.94	697	320	0.55	47934	82.98	744	87	0.15	56314	97.49
651	431	0.75	30437	52.69	698	281	0.49	48215	83.47	745	77	0.13	56391	97.62
652	411	0.71	30848	53.40	699	291	0.50	48506	83.97	746	66	0.11	56457	97.73
653	394	0.68	31242	54.08	700	270	0.47	48776	84.44	747	47	0.08	56504	97.82
654	430	0.74	31672	54.83	701	259	0.45	49035	84.89	748	58	0.10	56562	97.92
655	412	0.71	32084	55.54	702	296	0.51	49331	85.40	749	56	0.10	56618	98.01
656	401	0.69	32485	56.24	703	276	0.48	49607	85.88	750	51	0.09	56669	98.10
657	438	0.76	32923	56.99	704	249	0.43	49856	86.31	751	50	0.09	56719	98.19
658	422	0.73	33345	57.72	705	270	0.47	50126	86.77	752	47	0.08	56766	98.27
659	419	0.73	33764	58.45	706	245	0.42	50371	87.20	753	46	0.08	56812	98.35
660	457	0.79	34221	59.24	707	250	0.43	50621	87.63	754	47	0.08	56859	98.43
661	443	0.77	34664	60.01	708	251	0.43	50872	88.07	755	59	0.10	56918	98.53
662	419	0.73	35083	60.73	709	227	0.39	51099	88.46	756	44	0.08	56962	98.61
663	426	0.74	35509	61.47	710	213	0.37	51312	88.83	757	44	0.08	57006	98.68
664	418	0.72	35927	62.19	711	250	0.43	51562	89.26	758	35	0.06	57041	98.74
665	437	0.76	36364	62.95	712	222	0.38	51784	89.64	759	46	0.08	57087	98.82
666	422	0.73	36786	63.68	713	223	0.39	52007	90.03	760	34	0.06	57121	98.88
667	397	0.69	37183	64.37	714	214	0.37	52221	90.40	761	29	0.05	57150	98.93

**Table 176. Reading Grade 7 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
762	24	0.04	57174	98.98	810	3	0.01	57727	99.93
763	35	0.06	57209	99.04	811	1	0.00	57728	99.93
764	40	0.07	57249	99.11	812	4	0.01	57732	99.94
765	29	0.05	57278	99.16	813	4	0.01	57736	99.95
766	30	0.05	57308	99.21	814	1	0.00	57737	99.95
767	27	0.05	57335	99.25	815	2	0.00	57739	99.95
768	23	0.04	57358	99.29	817	2	0.00	57741	99.96
769	28	0.05	57386	99.34	819	1	0.00	57742	99.96
770	20	0.03	57406	99.38	820	2	0.00	57744	99.96
771	25	0.04	57431	99.42	822	1	0.00	57745	99.96
772	22	0.04	57453	99.46	824	1	0.00	57746	99.97
773	17	0.03	57470	99.49	825	2	0.00	57748	99.97
774	17	0.03	57487	99.52	826	1	0.00	57749	99.97
775	9	0.02	57496	99.53	829	3	0.01	57752	99.98
776	24	0.04	57520	99.57	830	2	0.00	57754	99.98
777	19	0.03	57539	99.61	833	1	0.00	57755	99.98
778	13	0.02	57552	99.63	834	2	0.00	57757	99.98
779	3	0.01	57555	99.63	835	1	0.00	57758	99.99
780	9	0.02	57564	99.65	837	1	0.00	57759	99.99
781	11	0.02	57575	99.67	841	1	0.00	57760	99.99
782	9	0.02	57584	99.68	844	1	0.00	57761	99.99
783	13	0.02	57597	99.71	847	1	0.00	57762	99.99
784	11	0.02	57608	99.73	868	1	0.00	57763	99.99
785	9	0.02	57617	99.74	876	1	0.00	57764	100
786	4	0.01	57621	99.75	879	1	0.00	57765	100
787	8	0.01	57629	99.76	980	1	0.00	57766	100
788	10	0.02	57639	99.78					
789	4	0.01	57643	99.79					
790	3	0.01	57646	99.79					
791	8	0.01	57654	99.81					
792	9	0.02	57663	99.82					
793	7	0.01	57670	99.83					
794	6	0.01	57676	99.84					
795	3	0.01	57679	99.85					
796	3	0.01	57682	99.85					
797	5	0.01	57687	99.86					
798	5	0.01	57692	99.87					
799	6	0.01	57698	99.88					
800	1	0.00	57699	99.88					
801	4	0.01	57703	99.89					
802	1	0.00	57704	99.89					
803	1	0.00	57705	99.89					
805	6	0.01	57711	99.90					
806	4	0.01	57715	99.91					
807	2	0.00	57717	99.92					
808	7	0.01	57724	99.93					

**Table 177. Writing Grade 7 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
240	27	0.05	27	0.05	318	2	0.00	111	0.19	366	12	0.02	398	0.69
242	2	0.00	29	0.05	319	4	0.01	115	0.20	367	17	0.03	415	0.72
246	1	0.00	30	0.05	320	6	0.01	121	0.21	368	13	0.02	428	0.74
253	1	0.00	31	0.05	321	4	0.01	125	0.22	369	13	0.02	441	0.76
254	2	0.00	33	0.06	322	3	0.01	128	0.22	370	19	0.03	460	0.80
257	1	0.00	34	0.06	323	4	0.01	132	0.23	371	21	0.04	481	0.83
258	1	0.00	35	0.06	324	4	0.01	136	0.24	372	18	0.03	499	0.86
259	1	0.00	36	0.06	325	3	0.01	139	0.24	373	15	0.03	514	0.89
263	1	0.00	37	0.06	326	4	0.01	143	0.25	374	17	0.03	531	0.92
267	1	0.00	38	0.07	328	1	0.00	144	0.25	375	14	0.02	545	0.94
270	2	0.00	40	0.07	329	2	0.00	146	0.25	376	18	0.03	563	0.97
271	2	0.00	42	0.07	330	5	0.01	151	0.26	377	17	0.03	580	1.00
273	1	0.00	43	0.07	331	1	0.00	152	0.26	378	18	0.03	598	1.04
274	2	0.00	45	0.08	332	4	0.01	156	0.27	379	12	0.02	610	1.06
278	2	0.00	47	0.08	333	2	0.00	158	0.27	380	18	0.03	628	1.09
279	2	0.00	49	0.08	334	2	0.00	160	0.28	381	16	0.03	644	1.11
281	1	0.00	50	0.09	335	4	0.01	164	0.28	382	18	0.03	662	1.15
282	1	0.00	51	0.09	336	3	0.01	167	0.29	383	14	0.02	676	1.17
283	2	0.00	53	0.09	337	4	0.01	171	0.30	384	20	0.03	696	1.20
284	3	0.01	56	0.10	338	9	0.02	180	0.31	385	23	0.04	719	1.24
285	1	0.00	57	0.10	339	5	0.01	185	0.32	386	22	0.04	741	1.28
286	1	0.00	58	0.10	340	6	0.01	191	0.33	387	22	0.04	763	1.32
288	2	0.00	60	0.10	341	5	0.01	196	0.34	388	22	0.04	785	1.36
289	1	0.00	61	0.11	342	9	0.02	205	0.35	389	18	0.03	803	1.39
290	1	0.00	62	0.11	343	6	0.01	211	0.37	390	24	0.04	827	1.43
292	1	0.00	63	0.11	344	8	0.01	219	0.38	391	22	0.04	849	1.47
293	1	0.00	64	0.11	345	7	0.01	226	0.39	392	20	0.03	869	1.50
294	4	0.01	68	0.12	346	4	0.01	230	0.40	393	23	0.04	892	1.54
295	1	0.00	69	0.12	347	5	0.01	235	0.41	394	31	0.05	923	1.60
298	1	0.00	70	0.12	348	3	0.01	238	0.41	395	31	0.05	954	1.65
299	1	0.00	71	0.12	349	4	0.01	242	0.42	396	28	0.05	982	1.70
300	2	0.00	73	0.13	350	10	0.02	252	0.44	397	25	0.04	1007	1.74
302	1	0.00	74	0.13	351	7	0.01	259	0.45	398	40	0.07	1047	1.81
303	2	0.00	76	0.13	352	7	0.01	266	0.46	399	30	0.05	1077	1.86
304	1	0.00	77	0.13	353	7	0.01	273	0.47	400	19	0.03	1096	1.90
305	2	0.00	79	0.14	354	5	0.01	278	0.48	401	48	0.08	1144	1.98
306	3	0.01	82	0.14	355	7	0.01	285	0.49	402	33	0.06	1177	2.04
307	1	0.00	83	0.14	356	9	0.02	294	0.51	403	26	0.05	1203	2.08
308	1	0.00	84	0.15	357	5	0.01	299	0.52	404	34	0.06	1237	2.14
309	3	0.01	87	0.15	358	9	0.02	308	0.53	405	24	0.04	1261	2.18
311	2	0.00	89	0.15	359	11	0.02	319	0.55	406	30	0.05	1291	2.23
312	3	0.01	92	0.16	360	6	0.01	325	0.56	407	25	0.04	1316	2.28
313	1	0.00	93	0.16	361	10	0.02	335	0.58	408	31	0.05	1347	2.33
314	4	0.01	97	0.17	362	9	0.02	344	0.60	409	33	0.06	1380	2.39
315	3	0.01	100	0.17	363	15	0.03	359	0.62	410	30	0.05	1410	2.44
316	6	0.01	106	0.18	364	17	0.03	376	0.65	411	38	0.07	1448	2.51
317	3	0.01	109	0.19	365	10	0.02	386	0.67	412	43	0.07	1491	2.58

**Table 177. Writing Grade 7 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
413	51	0.09	1542	2.67	460	119	0.21	5277	9.13	507	275	0.48	14375	24.88
414	48	0.08	1590	2.75	461	122	0.21	5399	9.35	508	267	0.46	14642	25.34
415	48	0.08	1638	2.84	462	126	0.22	5525	9.56	509	291	0.50	14933	25.85
416	38	0.07	1676	2.90	463	151	0.26	5676	9.82	510	275	0.48	15208	26.32
417	41	0.07	1717	2.97	464	137	0.24	5813	10.06	511	266	0.46	15474	26.78
418	54	0.09	1771	3.07	465	175	0.30	5988	10.36	512	267	0.46	15741	27.25
419	53	0.09	1824	3.16	466	131	0.23	6119	10.59	513	296	0.51	16037	27.76
420	49	0.08	1873	3.24	467	126	0.22	6245	10.81	514	295	0.51	16332	28.27
421	49	0.08	1922	3.33	468	156	0.27	6401	11.08	515	283	0.49	16615	28.76
422	54	0.09	1976	3.42	469	145	0.25	6546	11.33	516	293	0.51	16908	29.27
423	58	0.10	2034	3.52	470	129	0.22	6675	11.55	517	315	0.55	17223	29.81
424	51	0.09	2085	3.61	471	152	0.26	6827	11.82	518	279	0.48	17502	30.29
425	40	0.07	2125	3.68	472	139	0.24	6966	12.06	519	314	0.54	17816	30.84
426	71	0.12	2196	3.80	473	142	0.25	7108	12.30	520	308	0.53	18124	31.37
427	68	0.12	2264	3.92	474	182	0.32	7290	12.62	521	279	0.48	18403	31.85
428	57	0.10	2321	4.02	475	149	0.26	7439	12.88	522	321	0.56	18724	32.41
429	67	0.12	2388	4.13	476	170	0.29	7609	13.17	523	300	0.52	19024	32.93
430	64	0.11	2452	4.24	477	198	0.34	7807	13.51	524	285	0.49	19309	33.42
431	71	0.12	2523	4.37	478	168	0.29	7975	13.80	525	317	0.55	19626	33.97
432	60	0.10	2583	4.47	479	187	0.32	8162	14.13	526	315	0.55	19941	34.52
433	77	0.13	2660	4.60	480	179	0.31	8341	14.44	527	339	0.59	20280	35.10
434	80	0.14	2740	4.74	481	220	0.38	8561	14.82	528	323	0.56	20603	35.66
435	71	0.12	2811	4.87	482	179	0.31	8740	15.13	529	312	0.54	20915	36.20
436	82	0.14	2893	5.01	483	202	0.35	8942	15.48	530	326	0.56	21241	36.77
437	74	0.13	2967	5.14	484	182	0.32	9124	15.79	531	331	0.57	21572	37.34
438	74	0.13	3041	5.26	485	181	0.31	9305	16.11	532	297	0.51	21869	37.85
439	84	0.15	3125	5.41	486	173	0.30	9478	16.41	533	336	0.58	22205	38.43
440	70	0.12	3195	5.53	487	199	0.34	9677	16.75	534	339	0.59	22544	39.02
441	73	0.13	3268	5.66	488	194	0.34	9871	17.09	535	352	0.61	22896	39.63
442	96	0.17	3364	5.82	489	221	0.38	10092	17.47	536	350	0.61	23246	40.24
443	76	0.13	3440	5.95	490	212	0.37	10304	17.84	537	310	0.54	23556	40.77
444	88	0.15	3528	6.11	491	219	0.38	10523	18.21	538	350	0.61	23906	41.38
445	100	0.17	3628	6.28	492	200	0.35	10723	18.56	539	330	0.57	24236	41.95
446	92	0.16	3720	6.44	493	195	0.34	10918	18.90	540	342	0.59	24578	42.54
447	116	0.20	3836	6.64	494	227	0.39	11145	19.29	541	348	0.60	24926	43.14
448	95	0.16	3931	6.80	495	230	0.40	11375	19.69	542	355	0.61	25281	43.76
449	122	0.21	4053	7.02	496	217	0.38	11592	20.06	543	338	0.59	25619	44.34
450	114	0.20	4167	7.21	497	229	0.40	11821	20.46	544	351	0.61	25970	44.95
451	107	0.19	4274	7.40	498	252	0.44	12073	20.90	545	341	0.59	26311	45.54
452	95	0.16	4369	7.56	499	262	0.45	12335	21.35	546	375	0.65	26686	46.19
453	128	0.22	4497	7.78	500	271	0.47	12606	21.82	547	349	0.60	27035	46.80
454	92	0.16	4589	7.94	501	249	0.43	12855	22.25	548	343	0.59	27378	47.39
455	109	0.19	4698	8.13	502	281	0.49	13136	22.74	549	342	0.59	27720	47.98
456	103	0.18	4801	8.31	503	219	0.38	13355	23.12	550	380	0.66	28100	48.64
457	115	0.20	4916	8.51	504	245	0.42	13600	23.54	551	338	0.59	28438	49.22
458	108	0.19	5024	8.70	505	278	0.48	13878	24.02	552	340	0.59	28778	49.81
459	134	0.23	5158	8.93	506	222	0.38	14100	24.41	553	322	0.56	29100	50.37

**Table 177. Writing Grade 7 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
554	352	0.61	29452	50.98	601	277	0.48	44430	76.90	648	120	0.21	53247	92.17
555	393	0.68	29845	51.66	602	272	0.47	44702	77.38	649	114	0.20	53361	92.36
556	345	0.60	30190	52.26	603	271	0.47	44973	77.84	650	115	0.20	53476	92.56
557	362	0.63	30552	52.88	604	222	0.38	45195	78.23	651	102	0.18	53578	92.74
558	343	0.59	30895	53.48	605	246	0.43	45441	78.65	652	106	0.18	53684	92.92
559	344	0.60	31239	54.07	606	262	0.45	45703	79.11	653	107	0.19	53791	93.11
560	340	0.59	31579	54.66	607	238	0.41	45941	79.52	654	85	0.15	53876	93.25
561	322	0.56	31901	55.22	608	218	0.38	46159	79.90	655	90	0.16	53966	93.41
562	302	0.52	32203	55.74	609	238	0.41	46397	80.31	656	112	0.19	54078	93.60
563	375	0.65	32578	56.39	610	232	0.40	46629	80.71	657	117	0.20	54195	93.81
564	344	0.60	32922	56.99	611	230	0.40	46859	81.11	658	102	0.18	54297	93.98
565	353	0.61	33275	57.60	612	221	0.38	47080	81.49	659	101	0.17	54398	94.16
566	358	0.62	33633	58.22	613	222	0.38	47302	81.88	660	92	0.16	54490	94.32
567	376	0.65	34009	58.87	614	236	0.41	47538	82.28	661	78	0.14	54568	94.45
568	354	0.61	34363	59.48	615	229	0.40	47767	82.68	662	81	0.14	54649	94.59
569	335	0.58	34698	60.06	616	225	0.39	47992	83.07	663	77	0.13	54726	94.73
570	347	0.60	35045	60.66	617	221	0.38	48213	83.45	664	77	0.13	54803	94.86
571	304	0.53	35349	61.19	618	220	0.38	48433	83.83	665	73	0.13	54876	94.99
572	325	0.56	35674	61.75	619	195	0.34	48628	84.17	666	96	0.17	54972	95.15
573	298	0.52	35972	62.26	620	202	0.35	48830	84.52	667	98	0.17	55070	95.32
574	328	0.57	36300	62.83	621	181	0.31	49011	84.83	668	84	0.15	55154	95.47
575	347	0.60	36647	63.43	622	212	0.37	49223	85.20	669	77	0.13	55231	95.60
576	317	0.55	36964	63.98	623	215	0.37	49438	85.57	670	98	0.17	55329	95.77
577	329	0.57	37293	64.55	624	201	0.35	49639	85.92	671	50	0.09	55379	95.86
578	302	0.52	37595	65.07	625	177	0.31	49816	86.23	672	64	0.11	55443	95.97
579	306	0.53	37901	65.60	626	186	0.32	50002	86.55	673	49	0.08	55492	96.05
580	313	0.54	38214	66.15	627	169	0.29	50171	86.84	674	49	0.08	55541	96.14
581	318	0.55	38532	66.70	628	170	0.29	50341	87.14	675	65	0.11	55606	96.25
582	311	0.54	38843	67.23	629	184	0.32	50525	87.45	676	50	0.09	55656	96.34
583	336	0.58	39179	67.82	630	160	0.28	50685	87.73	677	51	0.09	55707	96.42
584	319	0.55	39498	68.37	631	173	0.30	50858	88.03	678	51	0.09	55758	96.51
585	312	0.54	39810	68.91	632	160	0.28	51018	88.31	679	82	0.14	55840	96.65
586	309	0.53	40119	69.44	633	169	0.29	51187	88.60	680	75	0.13	55915	96.78
587	311	0.54	40430	69.98	634	158	0.27	51345	88.87	681	77	0.13	55992	96.92
588	299	0.52	40729	70.50	635	153	0.26	51498	89.14	682	41	0.07	56033	96.99
589	280	0.48	41009	70.98	636	143	0.25	51641	89.39	683	57	0.10	56090	97.09
590	317	0.55	41326	71.53	637	147	0.25	51788	89.64	684	47	0.08	56137	97.17
591	306	0.53	41632	72.06	638	147	0.25	51935	89.89	685	42	0.07	56179	97.24
592	304	0.53	41936	72.59	639	143	0.25	52078	90.14	686	36	0.06	56215	97.30
593	301	0.52	42237	73.11	640	151	0.26	52229	90.40	687	36	0.06	56251	97.37
594	300	0.52	42537	73.63	641	147	0.25	52376	90.66	688	30	0.05	56281	97.42
595	288	0.50	42825	74.13	642	121	0.21	52497	90.87	689	31	0.05	56312	97.47
596	267	0.46	43092	74.59	643	105	0.18	52602	91.05	690	41	0.07	56353	97.54
597	273	0.47	43365	75.06	644	148	0.26	52750	91.31	691	32	0.06	56385	97.60
598	262	0.45	43627	75.51	645	132	0.23	52882	91.53	692	52	0.09	56437	97.69
599	273	0.47	43900	75.99	646	129	0.22	53011	91.76	693	55	0.10	56492	97.78
600	253	0.44	44153	76.42	647	116	0.20	53127	91.96	694	42	0.07	56534	97.86

**Table 177. Writing Grade 7 Scale Score Distribution (continued)**

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
695	74	0.13	56608	97.98	742	1	0.00	57441	99.43	800	1	0.00	57716	99.90
696	33	0.06	56641	98.04	743	1	0.00	57442	99.43	803	2	0.00	57718	99.90
697	37	0.06	56678	98.10	744	7	0.01	57449	99.44	813	1	0.00	57719	99.91
698	29	0.05	56707	98.15	745	7	0.01	57456	99.45	820	1	0.00	57720	99.91
699	24	0.04	56731	98.20	746	8	0.01	57464	99.47	830	4	0.01	57724	99.92
700	22	0.04	56753	98.23	747	10	0.02	57474	99.48	833	1	0.00	57725	99.92
701	21	0.04	56774	98.27	748	15	0.03	57489	99.51	836	5	0.01	57730	99.93
702	28	0.05	56802	98.32	749	3	0.01	57492	99.51	839	3	0.01	57733	99.93
703	25	0.04	56827	98.36	750	13	0.02	57505	99.54	842	8	0.01	57741	99.94
704	24	0.04	56851	98.40	751	43	0.07	57548	99.61	846	15	0.03	57756	99.97
705	24	0.04	56875	98.45	752	10	0.02	57558	99.63	850	6	0.01	57762	99.98
706	33	0.06	56908	98.50	753	16	0.03	57574	99.66	853	3	0.01	57765	99.99
707	34	0.06	56942	98.56	754	6	0.01	57580	99.67	872	1	0.00	57766	99.99
708	24	0.04	56966	98.60	755	3	0.01	57583	99.67	890	7	0.01	57773	100
709	20	0.03	56986	98.64	756	5	0.01	57588	99.68					
710	23	0.04	57009	98.68	757	9	0.02	57597	99.70					
711	35	0.06	57044	98.74	758	2	0.00	57599	99.70					
712	22	0.04	57066	98.78	759	5	0.01	57604	99.71					
713	17	0.03	57083	98.81	760	1	0.00	57605	99.71					
714	19	0.03	57102	98.84	761	1	0.00	57606	99.71					
715	18	0.03	57120	98.87	763	4	0.01	57610	99.72					
716	13	0.02	57133	98.89	766	1	0.00	57611	99.72					
717	13	0.02	57146	98.91	767	1	0.00	57612	99.72					
718	15	0.03	57161	98.94	769	1	0.00	57613	99.72					
719	7	0.01	57168	98.95	771	6	0.01	57619	99.73					
720	8	0.01	57176	98.97	772	2	0.00	57621	99.74					
721	10	0.02	57186	98.98	773	1	0.00	57622	99.74					
722	16	0.03	57202	99.01	774	2	0.00	57624	99.74					
723	30	0.05	57232	99.06	775	4	0.01	57628	99.75					
724	23	0.04	57255	99.10	776	1	0.00	57629	99.75					
725	16	0.03	57271	99.13	777	5	0.01	57634	99.76					
726	19	0.03	57290	99.16	779	8	0.01	57642	99.77					
727	20	0.03	57310	99.20	780	1	0.00	57643	99.77					
728	16	0.03	57326	99.23	781	9	0.02	57652	99.79					
729	28	0.05	57354	99.27	782	1	0.00	57653	99.79					
730	13	0.02	57367	99.30	783	18	0.03	57671	99.82					
731	10	0.02	57377	99.31	784	3	0.01	57674	99.83					
732	15	0.03	57392	99.34	785	8	0.01	57682	99.84					
733	7	0.01	57399	99.35	786	2	0.00	57684	99.85					
734	8	0.01	57407	99.37	787	2	0.00	57686	99.85					
735	4	0.01	57411	99.37	788	21	0.04	57707	99.89					
736	2	0.00	57413	99.38	790	2	0.00	57709	99.89					
737	5	0.01	57418	99.39	791	1	0.00	57710	99.89					
738	6	0.01	57424	99.40	792	1	0.00	57711	99.89					
739	6	0.01	57430	99.41	793	2	0.00	57713	99.90					
740	3	0.01	57433	99.41	796	1	0.00	57714	99.90					
741	7	0.01	57440	99.42	797	1	0.00	57715	99.90					

**Table 178. Mathematics Grade 7 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
280	351	0.61	351	0.61	331	4	0.01	540	0.93	378	24	0.04	1189	2.06
281	1	0.00	352	0.61	332	8	0.01	548	0.95	379	24	0.04	1213	2.10
282	2	0.00	354	0.61	333	6	0.01	554	0.96	380	24	0.04	1237	2.14
283	2	0.00	356	0.62	334	8	0.01	562	0.97	381	26	0.04	1263	2.18
284	5	0.01	361	0.62	335	4	0.01	566	0.98	382	18	0.03	1281	2.21
285	3	0.01	364	0.63	336	9	0.02	575	0.99	383	21	0.04	1302	2.25
286	1	0.00	365	0.63	337	10	0.02	585	1.01	384	28	0.05	1330	2.30
290	2	0.00	367	0.63	338	13	0.02	598	1.03	385	38	0.07	1368	2.37
291	4	0.01	371	0.64	339	9	0.02	607	1.05	386	32	0.06	1400	2.42
292	3	0.01	374	0.65	340	7	0.01	614	1.06	387	33	0.06	1433	2.48
293	2	0.00	376	0.65	341	6	0.01	620	1.07	388	22	0.04	1455	2.52
295	1	0.00	377	0.65	342	10	0.02	630	1.09	389	29	0.05	1484	2.57
296	1	0.00	378	0.65	343	21	0.04	651	1.13	390	31	0.05	1515	2.62
297	4	0.01	382	0.66	344	6	0.01	657	1.14	391	28	0.05	1543	2.67
298	2	0.00	384	0.66	345	7	0.01	664	1.15	392	32	0.06	1575	2.72
299	1	0.00	385	0.67	346	8	0.01	672	1.16	393	24	0.04	1599	2.76
300	6	0.01	391	0.68	347	13	0.02	685	1.18	394	30	0.05	1629	2.82
301	2	0.00	393	0.68	348	7	0.01	692	1.20	395	35	0.06	1664	2.88
302	6	0.01	399	0.69	349	5	0.01	697	1.21	396	36	0.06	1700	2.94
303	3	0.01	402	0.70	350	8	0.01	705	1.22	397	35	0.06	1735	3.00
304	4	0.01	406	0.70	351	7	0.01	712	1.23	398	40	0.07	1775	3.07
305	6	0.01	412	0.71	352	9	0.02	721	1.25	399	51	0.09	1826	3.16
306	2	0.00	414	0.72	353	11	0.02	732	1.27	400	33	0.06	1859	3.21
307	2	0.00	416	0.72	354	15	0.03	747	1.29	401	38	0.07	1897	3.28
308	1	0.00	417	0.72	355	18	0.03	765	1.32	402	48	0.08	1945	3.36
309	3	0.01	420	0.73	356	10	0.02	775	1.34	403	43	0.07	1988	3.44
310	4	0.01	424	0.73	357	15	0.03	790	1.37	404	56	0.10	2044	3.53
311	1	0.00	425	0.73	358	12	0.02	802	1.39	405	42	0.07	2086	3.61
312	1	0.00	426	0.74	359	18	0.03	820	1.42	406	45	0.08	2131	3.68
313	11	0.02	437	0.76	360	15	0.03	835	1.44	407	38	0.07	2169	3.75
314	5	0.01	442	0.76	361	9	0.02	844	1.46	408	56	0.10	2225	3.85
315	3	0.01	445	0.77	362	12	0.02	856	1.48	409	26	0.04	2251	3.89
316	9	0.02	454	0.78	363	21	0.04	877	1.52	410	58	0.10	2309	3.99
317	5	0.01	459	0.79	364	20	0.03	897	1.55	411	43	0.07	2352	4.07
318	5	0.01	464	0.80	365	14	0.02	911	1.58	412	49	0.08	2401	4.15
319	7	0.01	471	0.81	366	6	0.01	917	1.59	413	66	0.11	2467	4.27
320	7	0.01	478	0.83	367	18	0.03	935	1.62	414	45	0.08	2512	4.34
321	6	0.01	484	0.84	368	16	0.03	951	1.64	415	54	0.09	2566	4.44
322	3	0.01	487	0.84	369	22	0.04	973	1.68	416	67	0.12	2633	4.55
323	3	0.01	490	0.85	370	27	0.05	1000	1.73	417	57	0.10	2690	4.65
324	7	0.01	497	0.86	371	17	0.03	1017	1.76	418	46	0.08	2736	4.73
325	5	0.01	502	0.87	372	19	0.03	1036	1.79	419	54	0.09	2790	4.82
326	3	0.01	505	0.87	373	22	0.04	1058	1.83	420	42	0.07	2832	4.90
327	7	0.01	512	0.89	374	22	0.04	1080	1.87	421	61	0.11	2893	5.00
328	8	0.01	520	0.90	375	28	0.05	1108	1.92	422	52	0.09	2945	5.09
329	6	0.01	526	0.91	376	34	0.06	1142	1.97	423	56	0.10	3001	5.19
330	10	0.02	536	0.93	377	23	0.04	1165	2.01	424	60	0.10	3061	5.29

**Table 178. Mathematics Grade 7 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
425	74	0.13	3135	5.42	472	118	0.20	7933	13.72	519	248	0.43	17906	30.96
426	64	0.11	3199	5.53	473	154	0.27	8087	13.98	520	273	0.47	18179	31.43
427	57	0.10	3256	5.63	474	149	0.26	8236	14.24	521	271	0.47	18450	31.90
428	63	0.11	3319	5.74	475	164	0.28	8400	14.52	522	241	0.42	18691	32.32
429	69	0.12	3388	5.86	476	162	0.28	8562	14.80	523	265	0.46	18956	32.78
430	66	0.11	3454	5.97	477	154	0.27	8716	15.07	524	268	0.46	19224	33.24
431	63	0.11	3517	6.08	478	160	0.28	8876	15.35	525	270	0.47	19494	33.71
432	73	0.13	3590	6.21	479	156	0.27	9032	15.62	526	260	0.45	19754	34.16
433	74	0.13	3664	6.34	480	185	0.32	9217	15.94	527	273	0.47	20027	34.63
434	68	0.12	3732	6.45	481	172	0.30	9389	16.23	528	296	0.51	20323	35.14
435	81	0.14	3813	6.59	482	186	0.32	9575	16.56	529	312	0.54	20635	35.68
436	66	0.11	3879	6.71	483	170	0.29	9745	16.85	530	295	0.51	20930	36.19
437	84	0.15	3963	6.85	484	177	0.31	9922	17.16	531	291	0.50	21221	36.69
438	93	0.16	4056	7.01	485	175	0.30	10097	17.46	532	290	0.50	21511	37.19
439	84	0.15	4140	7.16	486	203	0.35	10300	17.81	533	277	0.48	21788	37.67
440	73	0.13	4213	7.28	487	205	0.35	10505	18.16	534	275	0.48	22063	38.15
441	79	0.14	4292	7.42	488	193	0.33	10698	18.50	535	280	0.48	22343	38.63
442	97	0.17	4389	7.59	489	207	0.36	10905	18.86	536	304	0.53	22647	39.16
443	86	0.15	4475	7.74	490	184	0.32	11089	19.17	537	296	0.51	22943	39.67
444	74	0.13	4549	7.87	491	180	0.31	11269	19.48	538	281	0.49	23224	40.15
445	102	0.18	4651	8.04	492	196	0.34	11465	19.82	539	285	0.49	23509	40.65
446	96	0.17	4747	8.21	493	184	0.32	11649	20.14	540	328	0.57	23837	41.21
447	108	0.19	4855	8.39	494	206	0.36	11855	20.50	541	302	0.52	24139	41.74
448	120	0.21	4975	8.60	495	230	0.40	12085	20.90	542	360	0.62	24499	42.36
449	127	0.22	5102	8.82	496	225	0.39	12310	21.28	543	321	0.56	24820	42.91
450	102	0.18	5204	9.00	497	221	0.38	12531	21.67	544	287	0.50	25107	43.41
451	91	0.16	5295	9.16	498	222	0.38	12753	22.05	545	315	0.54	25422	43.96
452	108	0.19	5403	9.34	499	205	0.35	12958	22.40	546	336	0.58	25758	44.54
453	110	0.19	5513	9.53	500	213	0.37	13171	22.77	547	296	0.51	26054	45.05
454	106	0.18	5619	9.72	501	225	0.39	13396	23.16	548	314	0.54	26368	45.59
455	97	0.17	5716	9.88	502	246	0.43	13642	23.59	549	305	0.53	26673	46.12
456	131	0.23	5847	10.11	503	222	0.38	13864	23.97	550	320	0.55	26993	46.67
457	141	0.24	5988	10.35	504	241	0.42	14105	24.39	551	276	0.48	27269	47.15
458	112	0.19	6100	10.55	505	232	0.40	14337	24.79	552	332	0.57	27601	47.72
459	120	0.21	6220	10.75	506	229	0.40	14566	25.19	553	341	0.59	27942	48.31
460	115	0.20	6335	10.95	507	245	0.42	14811	25.61	554	311	0.54	28253	48.85
461	134	0.23	6469	11.19	508	256	0.44	15067	26.05	555	284	0.49	28537	49.34
462	129	0.22	6598	11.41	509	230	0.40	15297	26.45	556	302	0.52	28839	49.86
463	126	0.22	6724	11.63	510	278	0.48	15575	26.93	557	327	0.57	29166	50.43
464	126	0.22	6850	11.84	511	254	0.44	15829	27.37	558	304	0.53	29470	50.95
465	116	0.20	6966	12.04	512	261	0.45	16090	27.82	559	306	0.53	29776	51.48
466	148	0.26	7114	12.30	513	269	0.47	16359	28.29	560	301	0.52	30077	52.00
467	148	0.26	7262	12.56	514	257	0.44	16616	28.73	561	313	0.54	30390	52.55
468	134	0.23	7396	12.79	515	253	0.44	16869	29.17	562	326	0.56	30716	53.11
469	142	0.25	7538	13.03	516	270	0.47	17139	29.63	563	287	0.50	31003	53.61
470	128	0.22	7666	13.25	517	262	0.45	17401	30.09	564	335	0.58	31338	54.18
471	149	0.26	7815	13.51	518	257	0.44	17658	30.53	565	293	0.51	31631	54.69



**Table 178. Mathematics Grade 7 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
566	316	0.55	31947	55.24	613	246	0.43	45802	79.19	660	121	0.21	54695	94.57
567	299	0.52	32246	55.75	614	251	0.43	46053	79.63	661	104	0.18	54799	94.75
568	304	0.53	32550	56.28	615	260	0.45	46313	80.08	662	95	0.16	54894	94.91
569	322	0.56	32872	56.84	616	250	0.43	46563	80.51	663	88	0.15	54982	95.07
570	329	0.57	33201	57.41	617	263	0.45	46826	80.96	664	109	0.19	55091	95.25
571	342	0.59	33543	58.00	618	218	0.38	47044	81.34	665	110	0.19	55201	95.44
572	335	0.58	33878	58.58	619	246	0.43	47290	81.77	666	108	0.19	55309	95.63
573	333	0.58	34211	59.15	620	225	0.39	47515	82.15	667	88	0.15	55397	95.78
574	360	0.62	34571	59.77	621	233	0.40	47748	82.56	668	93	0.16	55490	95.94
575	319	0.55	34890	60.33	622	265	0.46	48013	83.02	669	87	0.15	55577	96.09
576	338	0.58	35228	60.91	623	230	0.40	48243	83.41	670	85	0.15	55662	96.24
577	311	0.54	35539	61.45	624	209	0.36	48452	83.77	671	89	0.15	55751	96.39
578	306	0.53	35845	61.98	625	226	0.39	48678	84.17	672	60	0.10	55811	96.50
579	317	0.55	36162	62.53	626	210	0.36	48888	84.53	673	54	0.09	55865	96.59
580	303	0.52	36465	63.05	627	205	0.35	49093	84.88	674	88	0.15	55953	96.74
581	300	0.52	36765	63.57	628	218	0.38	49311	85.26	675	65	0.11	56018	96.86
582	326	0.56	37091	64.13	629	195	0.34	49506	85.60	676	80	0.14	56098	96.99
583	339	0.59	37430	64.72	630	230	0.40	49736	85.99	677	75	0.13	56173	97.12
584	325	0.56	37755	65.28	631	223	0.39	49959	86.38	678	64	0.11	56237	97.24
585	301	0.52	38056	65.80	632	197	0.34	50156	86.72	679	63	0.11	56300	97.34
586	263	0.45	38319	66.25	633	207	0.36	50363	87.08	680	54	0.09	56354	97.44
587	329	0.57	38648	66.82	634	194	0.34	50557	87.41	681	51	0.09	56405	97.53
588	260	0.45	38908	67.27	635	202	0.35	50759	87.76	682	60	0.10	56465	97.63
589	301	0.52	39209	67.79	636	201	0.35	50960	88.11	683	56	0.10	56521	97.73
590	304	0.53	39513	68.32	637	180	0.31	51140	88.42	684	59	0.10	56580	97.83
591	279	0.48	39792	68.80	638	180	0.31	51320	88.73	685	42	0.07	56622	97.90
592	317	0.55	40109	69.35	639	171	0.30	51491	89.03	686	54	0.09	56676	97.99
593	282	0.49	40391	69.84	640	183	0.32	51674	89.35	687	47	0.08	56723	98.08
594	294	0.51	40685	70.35	641	193	0.33	51867	89.68	688	47	0.08	56770	98.16
595	292	0.50	40977	70.85	642	176	0.30	52043	89.98	689	45	0.08	56815	98.23
596	310	0.54	41287	71.39	643	191	0.33	52234	90.31	690	48	0.08	56863	98.32
597	273	0.47	41560	71.86	644	185	0.32	52419	90.63	691	41	0.07	56904	98.39
598	278	0.48	41838	72.34	645	167	0.29	52586	90.92	692	32	0.06	56936	98.44
599	265	0.46	42103	72.80	646	165	0.29	52751	91.21	693	29	0.05	56965	98.49
600	280	0.48	42383	73.28	647	171	0.30	52922	91.50	694	37	0.06	57002	98.56
601	281	0.49	42664	73.77	648	174	0.30	53096	91.80	695	44	0.08	57046	98.63
602	280	0.48	42944	74.25	649	144	0.25	53240	92.05	696	40	0.07	57086	98.70
603	270	0.47	43214	74.72	650	157	0.27	53397	92.32	697	25	0.04	57111	98.75
604	293	0.51	43507	75.22	651	140	0.24	53537	92.57	698	40	0.07	57151	98.82
605	274	0.47	43781	75.70	652	140	0.24	53677	92.81	699	33	0.06	57184	98.87
606	292	0.50	44073	76.20	653	148	0.26	53825	93.06	700	24	0.04	57208	98.91
607	243	0.42	44316	76.62	654	142	0.25	53967	93.31	701	23	0.04	57231	98.95
608	233	0.40	44549	77.03	655	137	0.24	54104	93.55	702	21	0.04	57252	98.99
609	239	0.41	44788	77.44	656	121	0.21	54225	93.76	703	30	0.05	57282	99.04
610	238	0.41	45026	77.85	657	107	0.19	54332	93.94	704	24	0.04	57306	99.08
611	269	0.47	45295	78.32	658	131	0.23	54463	94.17	705	16	0.03	57322	99.11
612	261	0.45	45556	78.77	659	111	0.19	54574	94.36	706	23	0.04	57345	99.15

**Table 178. Mathematics Grade 7 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
707	20	0.03	57365	99.19	754	2	0.00	57776	99.90
708	22	0.04	57387	99.22	755	3	0.01	57779	99.90
709	20	0.03	57407	99.26	758	2	0.00	57781	99.90
710	22	0.04	57429	99.30	759	7	0.01	57788	99.92
711	23	0.04	57452	99.34	760	3	0.01	57791	99.92
712	18	0.03	57470	99.37	761	1	0.00	57792	99.92
713	15	0.03	57485	99.39	762	2	0.00	57794	99.93
714	8	0.01	57493	99.41	763	2	0.00	57796	99.93
715	22	0.04	57515	99.44	765	1	0.00	57797	99.93
716	14	0.02	57529	99.47	766	2	0.00	57799	99.94
717	15	0.03	57544	99.50	768	3	0.01	57802	99.94
718	15	0.03	57559	99.52	770	1	0.00	57803	99.94
719	10	0.02	57569	99.54	771	2	0.00	57805	99.95
720	10	0.02	57579	99.56	772	4	0.01	57809	99.95
721	11	0.02	57590	99.57	773	3	0.01	57812	99.96
722	17	0.03	57607	99.60	774	3	0.01	57815	99.96
723	8	0.01	57615	99.62	776	1	0.00	57816	99.97
724	7	0.01	57622	99.63	777	1	0.00	57817	99.97
725	14	0.02	57636	99.65	780	1	0.00	57818	99.97
726	12	0.02	57648	99.67	781	1	0.00	57819	99.97
727	7	0.01	57655	99.69	782	1	0.00	57820	99.97
728	8	0.01	57663	99.70	784	1	0.00	57821	99.97
729	2	0.00	57665	99.70	785	1	0.00	57822	99.98
730	5	0.01	57670	99.71	787	1	0.00	57823	99.98
731	9	0.02	57679	99.73	788	1	0.00	57824	99.98
732	6	0.01	57685	99.74	797	2	0.00	57826	99.98
733	3	0.01	57688	99.74	799	1	0.00	57827	99.98
734	8	0.01	57696	99.76	806	1	0.00	57828	99.99
735	9	0.02	57705	99.77	816	1	0.00	57829	99.99
736	4	0.01	57709	99.78	820	3	0.01	57832	99.99
737	4	0.01	57713	99.79	841	2	0.00	57834	100
738	3	0.01	57716	99.79	858	1	0.00	57835	100
739	2	0.00	57718	99.80	860	1	0.00	57836	100
740	6	0.01	57724	99.81					
741	4	0.01	57728	99.81					
742	4	0.01	57732	99.82					
743	7	0.01	57739	99.83					
744	3	0.01	57742	99.84					
745	6	0.01	57748	99.85					
746	6	0.01	57754	99.86					
747	3	0.01	57757	99.86					
748	3	0.01	57760	99.87					
749	1	0.00	57761	99.87					
750	6	0.01	57767	99.88					
751	3	0.01	57770	99.89					
752	1	0.00	57771	99.89					
753	3	0.01	57774	99.89					

**Table 179. Reading Grade 8 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
330	131	0.23	131	0.23	409	1	0.00	209	0.37	458	7	0.01	409	0.72
334	1	0.00	132	0.23	410	3	0.01	212	0.37	459	8	0.01	417	0.73
339	1	0.00	133	0.23	411	1	0.00	213	0.37	460	9	0.02	426	0.75
341	1	0.00	134	0.23	412	2	0.00	215	0.38	461	6	0.01	432	0.76
343	1	0.00	135	0.24	413	4	0.01	219	0.38	462	5	0.01	437	0.76
350	1	0.00	136	0.24	414	2	0.00	221	0.39	463	9	0.02	446	0.78
356	1	0.00	137	0.24	415	2	0.00	223	0.39	464	5	0.01	451	0.79
357	1	0.00	138	0.24	416	1	0.00	224	0.39	465	13	0.02	464	0.81
358	2	0.00	140	0.25	417	6	0.01	230	0.40	466	8	0.01	472	0.83
360	1	0.00	141	0.25	418	4	0.01	234	0.41	467	2	0.00	474	0.83
362	1	0.00	142	0.25	419	2	0.00	236	0.41	468	8	0.01	482	0.84
365	1	0.00	143	0.25	420	1	0.00	237	0.41	469	14	0.02	496	0.87
366	2	0.00	145	0.25	421	6	0.01	243	0.43	470	16	0.03	512	0.90
367	2	0.00	147	0.26	422	2	0.00	245	0.43	471	15	0.03	527	0.92
368	2	0.00	149	0.26	423	4	0.01	249	0.44	472	16	0.03	543	0.95
371	1	0.00	150	0.26	424	4	0.01	253	0.44	473	8	0.01	551	0.96
372	3	0.01	153	0.27	425	1	0.00	254	0.44	474	13	0.02	564	0.99
374	2	0.00	155	0.27	427	4	0.01	258	0.45	475	4	0.01	568	0.99
375	1	0.00	156	0.27	428	1	0.00	259	0.45	476	14	0.02	582	1.02
378	2	0.00	158	0.28	429	2	0.00	261	0.46	477	8	0.01	590	1.03
379	1	0.00	159	0.28	430	7	0.01	268	0.47	478	9	0.02	599	1.05
380	1	0.00	160	0.28	431	6	0.01	274	0.48	479	12	0.02	611	1.07
381	2	0.00	162	0.28	432	4	0.01	278	0.49	480	8	0.01	619	1.08
382	1	0.00	163	0.29	434	5	0.01	283	0.50	481	14	0.02	633	1.11
383	1	0.00	164	0.29	435	6	0.01	289	0.51	482	15	0.03	648	1.13
384	1	0.00	165	0.29	436	7	0.01	296	0.52	483	11	0.02	659	1.15
385	1	0.00	166	0.29	437	4	0.01	300	0.53	484	13	0.02	672	1.18
386	1	0.00	167	0.29	438	5	0.01	305	0.53	485	10	0.02	682	1.19
387	1	0.00	168	0.29	439	6	0.01	311	0.54	486	21	0.04	703	1.23
388	3	0.01	171	0.30	440	4	0.01	315	0.55	487	21	0.04	724	1.27
389	2	0.00	173	0.30	441	5	0.01	320	0.56	488	12	0.02	736	1.29
390	2	0.00	175	0.31	442	5	0.01	325	0.57	489	27	0.05	763	1.34
391	2	0.00	177	0.31	443	4	0.01	329	0.58	490	19	0.03	782	1.37
392	3	0.01	180	0.32	444	6	0.01	335	0.59	491	25	0.04	807	1.41
393	1	0.00	181	0.32	445	4	0.01	339	0.59	492	23	0.04	830	1.45
395	4	0.01	185	0.32	446	2	0.00	341	0.60	493	26	0.05	856	1.50
396	1	0.00	186	0.33	447	4	0.01	345	0.60	494	16	0.03	872	1.53
397	1	0.00	187	0.33	448	1	0.00	346	0.61	495	26	0.05	898	1.57
398	3	0.01	190	0.33	449	7	0.01	353	0.62	496	20	0.04	918	1.61
401	1	0.00	191	0.33	450	6	0.01	359	0.63	497	31	0.05	949	1.66
402	2	0.00	193	0.34	451	7	0.01	366	0.64	498	21	0.04	970	1.70
403	2	0.00	195	0.34	452	5	0.01	371	0.65	499	24	0.04	994	1.74
404	1	0.00	196	0.34	453	5	0.01	376	0.66	500	32	0.06	1026	1.80
405	4	0.01	200	0.35	454	2	0.00	378	0.66	501	23	0.04	1049	1.84
406	5	0.01	205	0.36	455	10	0.02	388	0.68	502	21	0.04	1070	1.87
407	1	0.00	206	0.36	456	6	0.01	394	0.69	503	21	0.04	1091	1.91
408	2	0.00	208	0.36	457	8	0.01	402	0.70	504	33	0.06	1124	1.97

**Table 179. Reading Grade 8 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
505	23	0.04	1147	2.01	552	68	0.12	3382	5.92	599	175	0.31	9307	16.29
506	29	0.05	1176	2.06	553	73	0.13	3455	6.05	600	222	0.39	9529	16.68
507	35	0.06	1211	2.12	554	81	0.14	3536	6.19	601	186	0.33	9715	17.01
508	32	0.06	1243	2.18	555	82	0.14	3618	6.33	602	203	0.36	9918	17.36
509	31	0.05	1274	2.23	556	81	0.14	3699	6.47	603	234	0.41	10152	17.77
510	31	0.05	1305	2.28	557	98	0.17	3797	6.65	604	212	0.37	10364	18.14
511	24	0.04	1329	2.33	558	70	0.12	3867	6.77	605	195	0.34	10559	18.48
512	25	0.04	1354	2.37	559	71	0.12	3938	6.89	606	209	0.37	10768	18.85
513	30	0.05	1384	2.42	560	97	0.17	4035	7.06	607	201	0.35	10969	19.20
514	39	0.07	1423	2.49	561	107	0.19	4142	7.25	608	230	0.40	11199	19.60
515	30	0.05	1453	2.54	562	98	0.17	4240	7.42	609	219	0.38	11418	19.99
516	38	0.07	1491	2.61	563	97	0.17	4337	7.59	610	232	0.41	11650	20.39
517	38	0.07	1529	2.68	564	80	0.14	4417	7.73	611	249	0.44	11899	20.83
518	43	0.08	1572	2.75	565	100	0.18	4517	7.91	612	218	0.38	12117	21.21
519	39	0.07	1611	2.82	566	96	0.17	4613	8.07	613	252	0.44	12369	21.65
520	40	0.07	1651	2.89	567	105	0.18	4718	8.26	614	268	0.47	12637	22.12
521	39	0.07	1690	2.96	568	112	0.20	4830	8.45	615	257	0.45	12894	22.57
522	39	0.07	1729	3.03	569	102	0.18	4932	8.63	616	268	0.47	13162	23.04
523	44	0.08	1773	3.10	570	117	0.20	5049	8.84	617	274	0.48	13436	23.52
524	46	0.08	1819	3.18	571	106	0.19	5155	9.02	618	270	0.47	13706	23.99
525	38	0.07	1857	3.25	572	118	0.21	5273	9.23	619	292	0.51	13998	24.50
526	50	0.09	1907	3.34	573	124	0.22	5397	9.45	620	287	0.50	14285	25.00
527	43	0.08	1950	3.41	574	115	0.20	5512	9.65	621	298	0.52	14583	25.53
528	36	0.06	1986	3.48	575	135	0.24	5647	9.88	622	291	0.51	14874	26.04
529	45	0.08	2031	3.56	576	132	0.23	5779	10.12	623	318	0.56	15192	26.59
530	44	0.08	2075	3.63	577	130	0.23	5909	10.34	624	305	0.53	15497	27.13
531	50	0.09	2125	3.72	578	132	0.23	6041	10.57	625	279	0.49	15776	27.61
532	50	0.09	2175	3.81	579	113	0.20	6154	10.77	626	332	0.58	16108	28.20
533	52	0.09	2227	3.90	580	129	0.23	6283	11.00	627	329	0.58	16437	28.77
534	60	0.11	2287	4.00	581	149	0.26	6432	11.26	628	317	0.55	16754	29.33
535	54	0.09	2341	4.10	582	139	0.24	6571	11.50	629	325	0.57	17079	29.89
536	54	0.09	2395	4.19	583	136	0.24	6707	11.74	630	357	0.62	17436	30.52
537	51	0.09	2446	4.28	584	140	0.25	6847	11.98	631	311	0.54	17747	31.06
538	58	0.10	2504	4.38	585	145	0.25	6992	12.24	632	313	0.55	18060	31.61
539	55	0.10	2559	4.48	586	149	0.26	7141	12.50	633	350	0.61	18410	32.22
540	53	0.09	2612	4.57	587	134	0.23	7275	12.73	634	348	0.61	18758	32.83
541	56	0.10	2668	4.67	588	161	0.28	7436	13.02	635	361	0.63	19119	33.47
542	68	0.12	2736	4.79	589	145	0.25	7581	13.27	636	363	0.64	19482	34.10
543	59	0.10	2795	4.89	590	170	0.30	7751	13.57	637	396	0.69	19878	34.79
544	66	0.12	2861	5.01	591	175	0.31	7926	13.87	638	382	0.67	20260	35.46
545	61	0.11	2922	5.11	592	148	0.26	8074	14.13	639	381	0.67	20641	36.13
546	51	0.09	2973	5.20	593	166	0.29	8240	14.42	640	339	0.59	20980	36.72
547	64	0.11	3037	5.32	594	154	0.27	8394	14.69	641	373	0.65	21353	37.38
548	73	0.13	3110	5.44	595	188	0.33	8582	15.02	642	391	0.68	21744	38.06
549	75	0.13	3185	5.58	596	176	0.31	8758	15.33	643	362	0.63	22106	38.69
550	67	0.12	3252	5.69	597	198	0.35	8956	15.68	644	419	0.73	22525	39.43
551	62	0.11	3314	5.80	598	176	0.31	9132	15.98	645	412	0.72	22937	40.15

**Table 179. Reading Grade 8 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
646	382	0.67	23319	40.82	693	395	0.69	43242	75.69	740	119	0.21	54916	96.12
647	431	0.75	23750	41.57	694	392	0.69	43634	76.38	741	99	0.17	55015	96.30
648	411	0.72	24161	42.29	695	348	0.61	43982	76.99	742	94	0.16	55109	96.46
649	385	0.67	24546	42.97	696	347	0.61	44329	77.59	743	90	0.16	55199	96.62
650	454	0.79	25000	43.76	697	346	0.61	44675	78.20	744	102	0.18	55301	96.80
651	432	0.76	25432	44.52	698	369	0.65	45044	78.84	745	84	0.15	55385	96.95
652	437	0.76	25869	45.28	699	366	0.64	45410	79.49	746	83	0.15	55468	97.09
653	409	0.72	26278	46.00	700	363	0.64	45773	80.12	747	91	0.16	55559	97.25
654	408	0.71	26686	46.71	701	352	0.62	46125	80.74	748	78	0.14	55637	97.39
655	445	0.78	27131	47.49	702	303	0.53	46428	81.27	749	73	0.13	55710	97.51
656	440	0.77	27571	48.26	703	334	0.58	46762	81.85	750	81	0.14	55791	97.66
657	429	0.75	28000	49.01	704	349	0.61	47111	82.46	751	84	0.15	55875	97.80
658	451	0.79	28451	49.80	705	333	0.58	47444	83.05	752	79	0.14	55954	97.94
659	449	0.79	28900	50.59	706	317	0.55	47761	83.60	753	61	0.11	56015	98.05
660	426	0.75	29326	51.33	707	279	0.49	48040	84.09	754	62	0.11	56077	98.16
661	420	0.74	29746	52.07	708	287	0.50	48327	84.59	755	48	0.08	56125	98.24
662	438	0.77	30184	52.83	709	282	0.49	48609	85.08	756	58	0.10	56183	98.34
663	445	0.78	30629	53.61	710	315	0.55	48924	85.64	757	52	0.09	56235	98.43
664	407	0.71	31036	54.33	711	280	0.49	49204	86.13	758	59	0.10	56294	98.54
665	445	0.78	31481	55.10	712	282	0.49	49486	86.62	759	39	0.07	56333	98.60
666	414	0.72	31895	55.83	713	270	0.47	49756	87.09	760	42	0.07	56375	98.68
667	442	0.77	32337	56.60	714	250	0.44	50006	87.53	761	47	0.08	56422	98.76
668	463	0.81	32800	57.41	715	248	0.43	50254	87.96	762	47	0.08	56469	98.84
669	446	0.78	33246	58.19	716	285	0.50	50539	88.46	763	52	0.09	56521	98.93
670	465	0.81	33711	59.01	717	240	0.42	50779	88.88	764	34	0.06	56555	98.99
671	428	0.75	34139	59.76	718	239	0.42	51018	89.30	765	28	0.05	56583	99.04
672	475	0.83	34614	60.59	719	261	0.46	51279	89.76	766	38	0.07	56621	99.11
673	423	0.74	35037	61.33	720	248	0.43	51527	90.19	767	34	0.06	56655	99.17
674	440	0.77	35477	62.10	721	239	0.42	51766	90.61	768	26	0.05	56681	99.21
675	457	0.80	35934	62.90	722	194	0.34	51960	90.95	769	22	0.04	56703	99.25
676	433	0.76	36367	63.66	723	230	0.40	52190	91.35	770	27	0.05	56730	99.30
677	476	0.83	36843	64.49	724	182	0.32	52372	91.67	771	29	0.05	56759	99.35
678	438	0.77	37281	65.26	725	208	0.36	52580	92.04	772	31	0.05	56790	99.40
679	402	0.70	37683	65.96	726	188	0.33	52768	92.36	773	23	0.04	56813	99.45
680	439	0.77	38122	66.73	727	201	0.35	52969	92.72	774	23	0.04	56836	99.49
681	380	0.67	38502	67.39	728	174	0.30	53143	93.02	775	16	0.03	56852	99.51
682	387	0.68	38889	68.07	729	210	0.37	53353	93.39	776	14	0.02	56866	99.54
683	370	0.65	39259	68.72	730	170	0.30	53523	93.69	777	15	0.03	56881	99.56
684	447	0.78	39706	69.50	731	162	0.28	53685	93.97	778	16	0.03	56897	99.59
685	424	0.74	40130	70.24	732	169	0.30	53854	94.27	779	12	0.02	56909	99.61
686	425	0.74	40555	70.99	733	152	0.27	54006	94.53	780	18	0.03	56927	99.64
687	375	0.66	40930	71.64	734	153	0.27	54159	94.80	781	9	0.02	56936	99.66
688	391	0.68	41321	72.33	735	136	0.24	54295	95.04	782	10	0.02	56946	99.68
689	393	0.69	41714	73.02	736	117	0.20	54412	95.24	783	14	0.02	56960	99.70
690	392	0.69	42106	73.70	737	143	0.25	54555	95.49	784	10	0.02	56970	99.72
691	364	0.64	42470	74.34	738	124	0.22	54679	95.71	785	14	0.02	56984	99.74
692	377	0.66	42847	75.00	739	118	0.21	54797	95.92	786	6	0.01	56990	99.75

**Table 179. Reading Grade 8 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %
787	2	0.00	56992	99.76
788	5	0.01	56997	99.77
789	9	0.02	57006	99.78
790	8	0.01	57014	99.80
791	5	0.01	57019	99.81
792	8	0.01	57027	99.82
793	10	0.02	57037	99.84
794	4	0.01	57041	99.84
795	6	0.01	57047	99.85
796	6	0.01	57053	99.87
797	5	0.01	57058	99.87
798	4	0.01	57062	99.88
799	4	0.01	57066	99.89
800	5	0.01	57071	99.90
801	1	0.00	57072	99.90
802	4	0.01	57076	99.91
804	6	0.01	57082	99.92
805	5	0.01	57087	99.92
806	4	0.01	57091	99.93
807	2	0.00	57093	99.94
808	5	0.01	57098	99.94
810	2	0.00	57100	99.95
811	2	0.00	57102	99.95
812	4	0.01	57106	99.96
813	2	0.00	57108	99.96
814	1	0.00	57109	99.96
816	1	0.00	57110	99.96
817	1	0.00	57111	99.97
818	1	0.00	57112	99.97
819	1	0.00	57113	99.97
822	1	0.00	57114	99.97
825	2	0.00	57116	99.98
826	2	0.00	57118	99.98
827	1	0.00	57119	99.98
830	1	0.00	57120	99.98
831	1	0.00	57121	99.98
835	1	0.00	57122	99.99
837	1	0.00	57123	99.99
843	1	0.00	57124	99.99
844	1	0.00	57125	99.99
846	1	0.00	57126	99.99
847	1	0.00	57127	99.99
848	1	0.00	57128	100
854	1	0.00	57129	100
865	1	0.00	57130	100

**Table 180. Writing Grade 8 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
250	23	0.04	23	0.04	333	4	0.01	106	0.19	381	12	0.02	389	0.68
254	1	0.00	24	0.04	335	4	0.01	110	0.19	382	6	0.01	395	0.69
255	1	0.00	25	0.04	336	3	0.01	113	0.20	383	19	0.03	414	0.73
257	2	0.00	27	0.05	337	3	0.01	116	0.20	384	12	0.02	426	0.75
260	1	0.00	28	0.05	338	3	0.01	119	0.21	385	9	0.02	435	0.76
261	2	0.00	30	0.05	339	3	0.01	122	0.21	386	10	0.02	445	0.78
262	1	0.00	31	0.05	340	4	0.01	126	0.22	387	19	0.03	464	0.81
266	2	0.00	33	0.06	341	3	0.01	129	0.23	388	13	0.02	477	0.84
271	2	0.00	35	0.06	342	4	0.01	133	0.23	389	21	0.04	498	0.87
273	1	0.00	36	0.06	343	3	0.01	136	0.24	390	20	0.04	518	0.91
275	1	0.00	37	0.06	344	3	0.01	139	0.24	391	24	0.04	542	0.95
277	2	0.00	39	0.07	345	4	0.01	143	0.25	392	14	0.02	556	0.97
283	3	0.01	42	0.07	346	3	0.01	146	0.26	393	14	0.02	570	1.00
286	1	0.00	43	0.08	347	5	0.01	151	0.26	394	17	0.03	587	1.03
289	1	0.00	44	0.08	348	5	0.01	156	0.27	395	18	0.03	605	1.06
295	1	0.00	45	0.08	349	5	0.01	161	0.28	396	19	0.03	624	1.09
297	5	0.01	50	0.09	350	3	0.01	164	0.29	397	22	0.04	646	1.13
299	1	0.00	51	0.09	351	4	0.01	168	0.29	398	21	0.04	667	1.17
300	1	0.00	52	0.09	352	3	0.01	171	0.30	399	21	0.04	688	1.20
301	2	0.00	54	0.09	353	3	0.01	174	0.30	400	17	0.03	705	1.23
302	1	0.00	55	0.10	354	5	0.01	179	0.31	401	25	0.04	730	1.28
303	1	0.00	56	0.10	355	6	0.01	185	0.32	402	18	0.03	748	1.31
304	2	0.00	58	0.10	356	8	0.01	193	0.34	403	33	0.06	781	1.37
305	1	0.00	59	0.10	357	3	0.01	196	0.34	404	30	0.05	811	1.42
307	1	0.00	60	0.11	358	6	0.01	202	0.35	405	27	0.05	838	1.47
308	1	0.00	61	0.11	359	3	0.01	205	0.36	406	25	0.04	863	1.51
309	1	0.00	62	0.11	360	2	0.00	207	0.36	407	25	0.04	888	1.56
310	3	0.01	65	0.11	361	6	0.01	213	0.37	408	35	0.06	923	1.62
311	1	0.00	66	0.12	362	7	0.01	220	0.39	409	34	0.06	957	1.68
312	1	0.00	67	0.12	363	6	0.01	226	0.40	410	29	0.05	986	1.73
313	2	0.00	69	0.12	364	7	0.01	233	0.41	411	24	0.04	1010	1.77
314	1	0.00	70	0.12	365	5	0.01	238	0.42	412	21	0.04	1031	1.81
315	3	0.01	73	0.13	366	8	0.01	246	0.43	413	29	0.05	1060	1.86
317	3	0.01	76	0.13	367	9	0.02	255	0.45	414	26	0.05	1086	1.90
319	1	0.00	77	0.13	368	2	0.00	257	0.45	415	42	0.07	1128	1.98
320	2	0.00	79	0.14	369	8	0.01	265	0.46	416	36	0.06	1164	2.04
321	2	0.00	81	0.14	370	9	0.02	274	0.48	417	33	0.06	1197	2.10
322	2	0.00	83	0.15	371	3	0.01	277	0.49	418	29	0.05	1226	2.15
323	4	0.01	87	0.15	372	9	0.02	286	0.50	419	46	0.08	1272	2.23
325	1	0.00	88	0.15	373	8	0.01	294	0.51	420	47	0.08	1319	2.31
326	2	0.00	90	0.16	374	12	0.02	306	0.54	421	48	0.08	1367	2.39
327	1	0.00	91	0.16	375	16	0.03	322	0.56	422	40	0.07	1407	2.46
328	3	0.01	94	0.16	376	6	0.01	328	0.57	423	48	0.08	1455	2.55
329	2	0.00	96	0.17	377	10	0.02	338	0.59	424	43	0.08	1498	2.62
330	2	0.00	98	0.17	378	14	0.02	352	0.62	425	43	0.08	1541	2.70
331	1	0.00	99	0.17	379	15	0.03	367	0.64	426	62	0.11	1603	2.81
332	3	0.01	102	0.18	380	10	0.02	377	0.66	427	47	0.08	1650	2.89

**Table 180. Writing Grade 8 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
428	49	0.09	1699	2.98	475	145	0.25	5801	10.16	522	275	0.48	15111	26.46
429	46	0.08	1745	3.06	476	140	0.25	5941	10.40	523	278	0.49	15389	26.95
430	38	0.07	1783	3.12	477	147	0.26	6088	10.66	524	278	0.49	15667	27.44
431	63	0.11	1846	3.23	478	129	0.23	6217	10.89	525	274	0.48	15941	27.92
432	49	0.09	1895	3.32	479	134	0.23	6351	11.12	526	272	0.48	16213	28.39
433	64	0.11	1959	3.43	480	152	0.27	6503	11.39	527	274	0.48	16487	28.87
434	58	0.10	2017	3.53	481	149	0.26	6652	11.65	528	267	0.47	16754	29.34
435	61	0.11	2078	3.64	482	138	0.24	6790	11.89	529	281	0.49	17035	29.83
436	51	0.09	2129	3.73	483	160	0.28	6950	12.17	530	288	0.50	17323	30.34
437	63	0.11	2192	3.84	484	168	0.29	7118	12.47	531	287	0.50	17610	30.84
438	54	0.09	2246	3.93	485	139	0.24	7257	12.71	532	286	0.50	17896	31.34
439	58	0.10	2304	4.03	486	159	0.28	7416	12.99	533	299	0.52	18195	31.86
440	67	0.12	2371	4.15	487	170	0.30	7586	13.28	534	316	0.55	18511	32.42
441	61	0.11	2432	4.26	488	174	0.30	7760	13.59	535	313	0.55	18824	32.96
442	72	0.13	2504	4.39	489	164	0.29	7924	13.88	536	316	0.55	19140	33.52
443	77	0.13	2581	4.52	490	183	0.32	8107	14.20	537	313	0.55	19453	34.07
444	48	0.08	2629	4.60	491	156	0.27	8263	14.47	538	288	0.50	19741	34.57
445	87	0.15	2716	4.76	492	161	0.28	8424	14.75	539	291	0.51	20032	35.08
446	85	0.15	2801	4.91	493	170	0.30	8594	15.05	540	322	0.56	20354	35.64
447	81	0.14	2882	5.05	494	203	0.36	8797	15.41	541	325	0.57	20679	36.21
448	72	0.13	2954	5.17	495	209	0.37	9006	15.77	542	291	0.51	20970	36.72
449	81	0.14	3035	5.31	496	181	0.32	9187	16.09	543	290	0.51	21260	37.23
450	72	0.13	3107	5.44	497	177	0.31	9364	16.40	544	322	0.56	21582	37.79
451	96	0.17	3203	5.61	498	175	0.31	9539	16.70	545	326	0.57	21908	38.37
452	71	0.12	3274	5.73	499	172	0.30	9711	17.01	546	322	0.56	22230	38.93
453	75	0.13	3349	5.86	500	186	0.33	9897	17.33	547	330	0.58	22560	39.51
454	72	0.13	3421	5.99	501	228	0.40	10125	17.73	548	352	0.62	22912	40.12
455	107	0.19	3528	6.18	502	207	0.36	10332	18.09	549	352	0.62	23264	40.74
456	93	0.16	3621	6.34	503	193	0.34	10525	18.43	550	338	0.59	23602	41.33
457	86	0.15	3707	6.49	504	207	0.36	10732	18.79	551	323	0.57	23925	41.90
458	109	0.19	3816	6.68	505	222	0.39	10954	19.18	552	331	0.58	24256	42.48
459	96	0.17	3912	6.85	506	202	0.35	11156	19.54	553	337	0.59	24593	43.07
460	124	0.22	4036	7.07	507	217	0.38	11373	19.92	554	336	0.59	24929	43.66
461	103	0.18	4139	7.25	508	221	0.39	11594	20.30	555	337	0.59	25266	44.25
462	111	0.19	4250	7.44	509	228	0.40	11822	20.70	556	384	0.67	25650	44.92
463	102	0.18	4352	7.62	510	237	0.42	12059	21.12	557	336	0.59	25986	45.51
464	103	0.18	4455	7.80	511	238	0.42	12297	21.53	558	306	0.54	26292	46.04
465	106	0.19	4561	7.99	512	213	0.37	12510	21.91	559	318	0.56	26610	46.60
466	117	0.20	4678	8.19	513	228	0.40	12738	22.31	560	336	0.59	26946	47.19
467	104	0.18	4782	8.37	514	243	0.43	12981	22.73	561	351	0.61	27297	47.80
468	116	0.20	4898	8.58	515	260	0.46	13241	23.19	562	329	0.58	27626	48.38
469	120	0.21	5018	8.79	516	239	0.42	13480	23.61	563	350	0.61	27976	48.99
470	141	0.25	5159	9.03	517	234	0.41	13714	24.02	564	361	0.63	28337	49.62
471	115	0.20	5274	9.24	518	281	0.49	13995	24.51	565	360	0.63	28697	50.25
472	131	0.23	5405	9.47	519	261	0.46	14256	24.97	566	339	0.59	29036	50.85
473	120	0.21	5525	9.68	520	300	0.53	14556	25.49	567	279	0.49	29315	51.34
474	131	0.23	5656	9.90	521	280	0.49	14836	25.98	568	326	0.57	29641	51.91



**Table 180. Writing Grade 8 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
569	350	0.61	29991	52.52	616	239	0.42	44195	77.40	663	97	0.17	52698	92.29
570	345	0.60	30336	53.13	617	238	0.42	44433	77.81	664	123	0.22	52821	92.50
571	333	0.58	30669	53.71	618	249	0.44	44682	78.25	665	115	0.20	52936	92.70
572	327	0.57	30996	54.28	619	237	0.42	44919	78.66	666	99	0.17	53035	92.88
573	328	0.57	31324	54.86	620	237	0.42	45156	79.08	667	105	0.18	53140	93.06
574	321	0.56	31645	55.42	621	247	0.43	45403	79.51	668	112	0.20	53252	93.26
575	329	0.58	31974	55.99	622	217	0.38	45620	79.89	669	102	0.18	53354	93.43
576	328	0.57	32302	56.57	623	228	0.40	45848	80.29	670	96	0.17	53450	93.60
577	359	0.63	32661	57.20	624	256	0.45	46104	80.74	671	102	0.18	53552	93.78
578	308	0.54	32969	57.74	625	231	0.40	46335	81.14	672	94	0.16	53646	93.95
579	332	0.58	33301	58.32	626	198	0.35	46533	81.49	673	91	0.16	53737	94.11
580	346	0.61	33647	58.92	627	196	0.34	46729	81.83	674	99	0.17	53836	94.28
581	311	0.54	33958	59.47	628	212	0.37	46941	82.20	675	79	0.14	53915	94.42
582	320	0.56	34278	60.03	629	208	0.36	47149	82.57	676	95	0.17	54010	94.58
583	319	0.56	34597	60.59	630	207	0.36	47356	82.93	677	100	0.18	54110	94.76
584	380	0.67	34977	61.25	631	214	0.37	47570	83.31	678	108	0.19	54218	94.95
585	322	0.56	35299	61.82	632	198	0.35	47768	83.65	679	74	0.13	54292	95.08
586	328	0.57	35627	62.39	633	214	0.37	47982	84.03	680	99	0.17	54391	95.25
587	307	0.54	35934	62.93	634	193	0.34	48175	84.37	681	77	0.13	54468	95.39
588	313	0.55	36247	63.48	635	182	0.32	48357	84.68	682	70	0.12	54538	95.51
589	342	0.60	36589	64.08	636	210	0.37	48567	85.05	683	58	0.10	54596	95.61
590	304	0.53	36893	64.61	637	184	0.32	48751	85.37	684	69	0.12	54665	95.73
591	318	0.56	37211	65.16	638	196	0.34	48947	85.72	685	67	0.12	54732	95.85
592	317	0.56	37528	65.72	639	166	0.29	49113	86.01	686	46	0.08	54778	95.93
593	300	0.53	37828	66.25	640	191	0.33	49304	86.34	687	69	0.12	54847	96.05
594	302	0.53	38130	66.77	641	169	0.30	49473	86.64	688	69	0.12	54916	96.17
595	291	0.51	38421	67.28	642	199	0.35	49672	86.99	689	59	0.10	54975	96.27
596	318	0.56	38739	67.84	643	167	0.29	49839	87.28	690	44	0.08	55019	96.35
597	303	0.53	39042	68.37	644	150	0.26	49989	87.54	691	45	0.08	55064	96.43
598	311	0.54	39353	68.92	645	163	0.29	50152	87.83	692	62	0.11	55126	96.54
599	294	0.51	39647	69.43	646	162	0.28	50314	88.11	693	55	0.10	55181	96.63
600	290	0.51	39937	69.94	647	163	0.29	50477	88.40	694	49	0.09	55230	96.72
601	280	0.49	40217	70.43	648	161	0.28	50638	88.68	695	53	0.09	55283	96.81
602	282	0.49	40499	70.92	649	168	0.29	50806	88.97	696	45	0.08	55328	96.89
603	313	0.55	40812	71.47	650	161	0.28	50967	89.25	697	56	0.10	55384	96.99
604	297	0.52	41109	71.99	651	178	0.31	51145	89.57	698	50	0.09	55434	97.08
605	272	0.48	41381	72.47	652	159	0.28	51304	89.84	699	68	0.12	55502	97.20
606	284	0.50	41665	72.96	653	135	0.24	51439	90.08	700	52	0.09	55554	97.29
607	288	0.50	41953	73.47	654	142	0.25	51581	90.33	701	44	0.08	55598	97.36
608	257	0.45	42210	73.92	655	113	0.20	51694	90.53	702	40	0.07	55638	97.43
609	240	0.42	42450	74.34	656	127	0.22	51821	90.75	703	37	0.06	55675	97.50
610	285	0.50	42735	74.84	657	142	0.25	51963	91.00	704	42	0.07	55717	97.57
611	240	0.42	42975	75.26	658	120	0.21	52083	91.21	705	44	0.08	55761	97.65
612	225	0.39	43200	75.65	659	112	0.20	52195	91.41	706	41	0.07	55802	97.72
613	253	0.44	43453	76.10	660	143	0.25	52338	91.66	707	35	0.06	55837	97.78
614	264	0.46	43717	76.56	661	144	0.25	52482	91.91	708	28	0.05	55865	97.83
615	239	0.42	43956	76.98	662	119	0.21	52601	92.12	709	29	0.05	55894	97.88

**Table 180. Writing Grade 8 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
710	39	0.07	55933	97.95	757	6	0.01	56812	99.49
711	56	0.10	55989	98.05	758	3	0.01	56815	99.50
712	22	0.04	56011	98.09	759	2	0.00	56817	99.50
713	44	0.08	56055	98.16	760	14	0.02	56831	99.52
714	39	0.07	56094	98.23	761	2	0.00	56833	99.53
715	27	0.05	56121	98.28	762	8	0.01	56841	99.54
716	24	0.04	56145	98.32	763	4	0.01	56845	99.55
717	22	0.04	56167	98.36	764	3	0.01	56848	99.55
718	36	0.06	56203	98.42	765	3	0.01	56851	99.56
719	26	0.05	56229	98.47	766	1	0.00	56852	99.56
720	30	0.05	56259	98.52	767	5	0.01	56857	99.57
721	16	0.03	56275	98.55	768	1	0.00	56858	99.57
722	30	0.05	56305	98.60	769	1	0.00	56859	99.57
723	13	0.02	56318	98.63	771	3	0.01	56862	99.58
724	15	0.03	56333	98.65	773	3	0.01	56865	99.58
725	15	0.03	56348	98.68	775	5	0.01	56870	99.59
726	32	0.06	56380	98.73	776	28	0.05	56898	99.64
727	34	0.06	56414	98.79	777	3	0.01	56901	99.65
728	40	0.07	56454	98.86	778	22	0.04	56923	99.68
729	19	0.03	56473	98.90	779	2	0.00	56925	99.69
730	16	0.03	56489	98.92	780	30	0.05	56955	99.74
731	20	0.04	56509	98.96	781	5	0.01	56960	99.75
732	11	0.02	56520	98.98	782	1	0.00	56961	99.75
733	5	0.01	56525	98.99	783	4	0.01	56965	99.76
734	10	0.02	56535	99.01	784	5	0.01	56970	99.77
735	17	0.03	56552	99.04	787	6	0.01	56976	99.78
736	12	0.02	56564	99.06	788	2	0.00	56978	99.78
737	15	0.03	56579	99.08	789	2	0.00	56980	99.78
738	8	0.01	56587	99.10	793	1	0.00	56981	99.79
739	13	0.02	56600	99.12	794	1	0.00	56982	99.79
740	7	0.01	56607	99.13	796	9	0.02	56991	99.80
741	5	0.01	56612	99.14	797	2	0.00	56993	99.81
742	3	0.01	56615	99.15	800	3	0.01	56996	99.81
743	4	0.01	56619	99.15	803	1	0.00	56997	99.81
744	8	0.01	56627	99.17	806	3	0.01	57000	99.82
745	8	0.01	56635	99.18	809	1	0.00	57001	99.82
746	10	0.02	56645	99.20	819	2	0.00	57003	99.82
747	20	0.04	56665	99.23	825	1	0.00	57004	99.83
748	60	0.11	56725	99.34	826	9	0.02	57013	99.84
749	19	0.03	56744	99.37	829	31	0.05	57044	99.90
750	14	0.02	56758	99.40	834	22	0.04	57066	99.94
751	24	0.04	56782	99.44	836	7	0.01	57073	99.95
752	7	0.01	56789	99.45	841	1	0.00	57074	99.95
753	5	0.01	56794	99.46	845	2	0.00	57076	99.95
754	7	0.01	56801	99.47	849	1	0.00	57077	99.95
755	2	0.00	56803	99.47	910	26	0.05	57103	100
756	3	0.01	56806	99.48					

**Table 181. Mathematics Grade 8 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
310	304	0.53	304	0.53	357	9	0.02	561	0.98	404	18	0.03	1161	2.03
311	4	0.01	308	0.54	358	2	0.00	563	0.98	405	28	0.05	1189	2.08
312	4	0.01	312	0.55	359	6	0.01	569	0.99	406	31	0.05	1220	2.13
313	2	0.00	314	0.55	360	8	0.01	577	1.01	407	17	0.03	1237	2.16
314	3	0.01	317	0.55	361	7	0.01	584	1.02	408	14	0.02	1251	2.19
315	4	0.01	321	0.56	362	8	0.01	592	1.04	409	22	0.04	1273	2.23
316	3	0.01	324	0.57	363	14	0.02	606	1.06	410	23	0.04	1296	2.27
317	3	0.01	327	0.57	364	11	0.02	617	1.08	411	33	0.06	1329	2.32
318	2	0.00	329	0.58	365	3	0.01	620	1.08	412	19	0.03	1348	2.36
319	5	0.01	334	0.58	366	7	0.01	627	1.10	413	32	0.06	1380	2.41
320	1	0.00	335	0.59	367	8	0.01	635	1.11	414	29	0.05	1409	2.46
321	5	0.01	340	0.59	368	8	0.01	643	1.12	415	17	0.03	1426	2.49
322	4	0.01	344	0.60	369	9	0.02	652	1.14	416	26	0.05	1452	2.54
323	5	0.01	349	0.61	370	13	0.02	665	1.16	417	22	0.04	1474	2.58
324	6	0.01	355	0.62	371	8	0.01	673	1.18	418	30	0.05	1504	2.63
325	4	0.01	359	0.63	372	10	0.02	683	1.19	419	29	0.05	1533	2.68
326	5	0.01	364	0.64	373	10	0.02	693	1.21	420	31	0.05	1564	2.73
327	6	0.01	370	0.65	374	7	0.01	700	1.22	421	33	0.06	1597	2.79
328	2	0.00	372	0.65	375	16	0.03	716	1.25	422	34	0.06	1631	2.85
329	6	0.01	378	0.66	376	7	0.01	723	1.26	423	26	0.05	1657	2.90
330	4	0.01	382	0.67	377	12	0.02	735	1.29	424	40	0.07	1697	2.97
331	4	0.01	386	0.67	378	7	0.01	742	1.30	425	34	0.06	1731	3.03
332	2	0.00	388	0.68	379	15	0.03	757	1.32	426	40	0.07	1771	3.10
333	6	0.01	394	0.69	380	9	0.02	766	1.34	427	40	0.07	1811	3.17
334	2	0.00	396	0.69	381	12	0.02	778	1.36	428	28	0.05	1839	3.22
335	4	0.01	400	0.70	382	9	0.02	787	1.38	429	36	0.06	1875	3.28
336	4	0.01	404	0.71	383	10	0.02	797	1.39	430	41	0.07	1916	3.35
337	5	0.01	409	0.72	384	10	0.02	807	1.41	431	43	0.08	1959	3.43
338	7	0.01	416	0.73	385	15	0.03	822	1.44	432	47	0.08	2006	3.51
339	4	0.01	420	0.73	386	21	0.04	843	1.47	433	37	0.06	2043	3.57
340	7	0.01	427	0.75	387	22	0.04	865	1.51	434	36	0.06	2079	3.64
341	7	0.01	434	0.76	388	17	0.03	882	1.54	435	42	0.07	2121	3.71
342	14	0.02	448	0.78	389	12	0.02	894	1.56	436	41	0.07	2162	3.78
343	5	0.01	453	0.79	390	14	0.02	908	1.59	437	49	0.09	2211	3.87
344	7	0.01	460	0.80	391	17	0.03	925	1.62	438	43	0.08	2254	3.94
345	5	0.01	465	0.81	392	21	0.04	946	1.65	439	42	0.07	2296	4.01
346	8	0.01	473	0.83	393	9	0.02	955	1.67	440	41	0.07	2337	4.09
347	10	0.02	483	0.84	394	11	0.02	966	1.69	441	47	0.08	2384	4.17
348	7	0.01	490	0.86	395	19	0.03	985	1.72	442	54	0.09	2438	4.26
349	6	0.01	496	0.87	396	19	0.03	1004	1.76	443	36	0.06	2474	4.33
350	7	0.01	503	0.88	397	18	0.03	1022	1.79	444	40	0.07	2514	4.40
351	7	0.01	510	0.89	398	14	0.02	1036	1.81	445	50	0.09	2564	4.48
352	12	0.02	522	0.91	399	19	0.03	1055	1.84	446	51	0.09	2615	4.57
353	7	0.01	529	0.92	400	19	0.03	1074	1.88	447	44	0.08	2659	4.65
354	9	0.02	538	0.94	401	26	0.05	1100	1.92	448	56	0.10	2715	4.75
355	7	0.01	545	0.95	402	19	0.03	1119	1.96	449	58	0.10	2773	4.85
356	7	0.01	552	0.97	403	24	0.04	1143	2.00	450	63	0.11	2836	4.96

**Table 181. Mathematics Grade 8 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
451	50	0.09	2886	5.05	498	141	0.25	7328	12.81	545	292	0.51	17631	30.83
452	55	0.10	2941	5.14	499	167	0.29	7495	13.11	546	283	0.49	17914	31.32
453	59	0.10	3000	5.25	500	157	0.27	7652	13.38	547	281	0.49	18195	31.81
454	55	0.10	3055	5.34	501	159	0.28	7811	13.66	548	269	0.47	18464	32.28
455	50	0.09	3105	5.43	502	169	0.30	7980	13.95	549	282	0.49	18746	32.78
456	58	0.10	3163	5.53	503	156	0.27	8136	14.23	550	326	0.57	19072	33.35
457	64	0.11	3227	5.64	504	165	0.29	8301	14.51	551	296	0.52	19368	33.87
458	69	0.12	3296	5.76	505	176	0.31	8477	14.82	552	305	0.53	19673	34.40
459	83	0.15	3379	5.91	506	172	0.30	8649	15.12	553	313	0.55	19986	34.95
460	58	0.10	3437	6.01	507	180	0.31	8829	15.44	554	316	0.55	20302	35.50
461	65	0.11	3502	6.12	508	168	0.29	8997	15.73	555	297	0.52	20599	36.02
462	67	0.12	3569	6.24	509	160	0.28	9157	16.01	556	313	0.55	20912	36.57
463	78	0.14	3647	6.38	510	166	0.29	9323	16.30	557	320	0.56	21232	37.12
464	66	0.12	3713	6.49	511	169	0.30	9492	16.60	558	329	0.58	21561	37.70
465	79	0.14	3792	6.63	512	196	0.34	9688	16.94	559	347	0.61	21908	38.31
466	77	0.13	3869	6.77	513	182	0.32	9870	17.26	560	340	0.59	22248	38.90
467	90	0.16	3959	6.92	514	187	0.33	10057	17.58	561	320	0.56	22568	39.46
468	67	0.12	4026	7.04	515	173	0.30	10230	17.89	562	314	0.55	22882	40.01
469	83	0.15	4109	7.18	516	177	0.31	10407	18.20	563	354	0.62	23236	40.63
470	68	0.12	4177	7.30	517	210	0.37	10617	18.56	564	324	0.57	23560	41.20
471	71	0.12	4248	7.43	518	199	0.35	10816	18.91	565	341	0.60	23901	41.79
472	90	0.16	4338	7.59	519	222	0.39	11038	19.30	566	288	0.50	24189	42.30
473	91	0.16	4429	7.74	520	209	0.37	11247	19.67	567	335	0.59	24524	42.88
474	91	0.16	4520	7.90	521	215	0.38	11462	20.04	568	352	0.62	24876	43.50
475	95	0.17	4615	8.07	522	239	0.42	11701	20.46	569	363	0.63	25239	44.13
476	92	0.16	4707	8.23	523	239	0.42	11940	20.88	570	322	0.56	25561	44.69
477	103	0.18	4810	8.41	524	221	0.39	12161	21.26	571	367	0.64	25928	45.34
478	93	0.16	4903	8.57	525	240	0.42	12401	21.68	572	343	0.60	26271	45.94
479	101	0.18	5004	8.75	526	241	0.42	12642	22.10	573	362	0.63	26633	46.57
480	110	0.19	5114	8.94	527	225	0.39	12867	22.50	574	347	0.61	26980	47.18
481	95	0.17	5209	9.11	528	233	0.41	13100	22.91	575	298	0.52	27278	47.70
482	87	0.15	5296	9.26	529	239	0.42	13339	23.32	576	363	0.63	27641	48.33
483	110	0.19	5406	9.45	530	271	0.47	13610	23.80	577	370	0.65	28011	48.98
484	124	0.22	5530	9.67	531	272	0.48	13882	24.27	578	340	0.59	28351	49.57
485	112	0.20	5642	9.87	532	243	0.42	14125	24.70	579	338	0.59	28689	50.16
486	116	0.20	5758	10.07	533	255	0.45	14380	25.14	580	328	0.57	29017	50.74
487	93	0.16	5851	10.23	534	293	0.51	14673	25.66	581	332	0.58	29349	51.32
488	143	0.25	5994	10.48	535	242	0.42	14915	26.08	582	349	0.61	29698	51.93
489	135	0.24	6129	10.72	536	221	0.39	15136	26.47	583	361	0.63	30059	52.56
490	129	0.23	6258	10.94	537	279	0.49	15415	26.95	584	380	0.66	30439	53.22
491	123	0.22	6381	11.16	538	282	0.49	15697	27.45	585	366	0.64	30805	53.86
492	132	0.23	6513	11.39	539	259	0.45	15956	27.90	586	353	0.62	31158	54.48
493	136	0.24	6649	11.63	540	280	0.49	16236	28.39	587	309	0.54	31467	55.02
494	133	0.23	6782	11.86	541	287	0.50	16523	28.89	588	353	0.62	31820	55.64
495	113	0.20	6895	12.06	542	288	0.50	16811	29.39	589	342	0.60	32162	56.24
496	134	0.23	7029	12.29	543	288	0.50	17099	29.90	590	350	0.61	32512	56.85
497	158	0.28	7187	12.57	544	240	0.42	17339	30.32	591	331	0.58	32843	57.43

**Table 181. Mathematics Grade 8 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
592	350	0.61	33193	58.04	639	215	0.38	47129	82.41	686	107	0.19	54720	95.68
593	341	0.60	33534	58.64	640	271	0.47	47400	82.88	687	100	0.17	54820	95.85
594	341	0.60	33875	59.23	641	230	0.40	47630	83.28	688	88	0.15	54908	96.01
595	317	0.55	34192	59.79	642	235	0.41	47865	83.69	689	75	0.13	54983	96.14
596	344	0.60	34536	60.39	643	205	0.36	48070	84.05	690	78	0.14	55061	96.28
597	312	0.55	34848	60.93	644	221	0.39	48291	84.44	691	74	0.13	55135	96.41
598	314	0.55	35162	61.48	645	229	0.40	48520	84.84	692	64	0.11	55199	96.52
599	332	0.58	35494	62.06	646	222	0.39	48742	85.23	693	75	0.13	55274	96.65
600	344	0.60	35838	62.66	647	225	0.39	48967	85.62	694	82	0.14	55356	96.79
601	323	0.56	36161	63.23	648	203	0.35	49170	85.98	695	71	0.12	55427	96.92
602	332	0.58	36493	63.81	649	193	0.34	49363	86.31	696	54	0.09	55481	97.01
603	316	0.55	36809	64.36	650	209	0.37	49572	86.68	697	71	0.12	55552	97.13
604	313	0.55	37122	64.91	651	212	0.37	49784	87.05	698	52	0.09	55604	97.23
605	346	0.60	37468	65.51	652	194	0.34	49978	87.39	699	63	0.11	55667	97.34
606	319	0.56	37787	66.07	653	191	0.33	50169	87.72	700	61	0.11	55728	97.44
607	315	0.55	38102	66.62	654	178	0.31	50347	88.03	701	44	0.08	55772	97.52
608	319	0.56	38421	67.18	655	186	0.33	50533	88.36	702	52	0.09	55824	97.61
609	326	0.57	38747	67.75	656	216	0.38	50749	88.74	703	41	0.07	55865	97.68
610	307	0.54	39054	68.29	657	181	0.32	50930	89.05	704	52	0.09	55917	97.77
611	306	0.54	39360	68.82	658	154	0.27	51084	89.32	705	33	0.06	55950	97.83
612	296	0.52	39656	69.34	659	177	0.31	51261	89.63	706	42	0.07	55992	97.90
613	328	0.57	39984	69.91	660	164	0.29	51425	89.92	707	38	0.07	56030	97.97
614	297	0.52	40281	70.43	661	156	0.27	51581	90.19	708	47	0.08	56077	98.05
615	298	0.52	40579	70.95	662	176	0.31	51757	90.50	709	26	0.05	56103	98.10
616	288	0.50	40867	71.46	663	156	0.27	51913	90.77	710	50	0.09	56153	98.19
617	287	0.50	41154	71.96	664	147	0.26	52060	91.03	711	37	0.06	56190	98.25
618	326	0.57	41480	72.53	665	150	0.26	52210	91.29	712	48	0.08	56238	98.33
619	283	0.49	41763	73.02	666	151	0.26	52361	91.55	713	28	0.05	56266	98.38
620	308	0.54	42071	73.56	667	142	0.25	52503	91.80	714	40	0.07	56306	98.45
621	311	0.54	42382	74.11	668	144	0.25	52647	92.05	715	26	0.05	56332	98.50
622	295	0.52	42677	74.62	669	151	0.26	52798	92.32	716	36	0.06	56368	98.56
623	253	0.44	42930	75.06	670	126	0.22	52924	92.54	717	30	0.05	56398	98.61
624	281	0.49	43211	75.56	671	137	0.24	53061	92.78	718	35	0.06	56433	98.67
625	278	0.49	43489	76.04	672	154	0.27	53215	93.05	719	26	0.05	56459	98.72
626	281	0.49	43770	76.53	673	109	0.19	53324	93.24	720	29	0.05	56488	98.77
627	274	0.48	44044	77.01	674	110	0.19	53434	93.43	721	14	0.02	56502	98.80
628	270	0.47	44314	77.48	675	135	0.24	53569	93.67	722	24	0.04	56526	98.84
629	267	0.47	44581	77.95	676	130	0.23	53699	93.89	723	24	0.04	56550	98.88
630	263	0.46	44844	78.41	677	116	0.20	53815	94.10	724	24	0.04	56574	98.92
631	281	0.49	45125	78.90	678	119	0.21	53934	94.31	725	26	0.05	56600	98.97
632	282	0.49	45407	79.40	679	110	0.19	54044	94.50	726	27	0.05	56627	99.01
633	273	0.48	45680	79.87	680	110	0.19	54154	94.69	727	18	0.03	56645	99.05
634	265	0.46	45945	80.34	681	100	0.17	54254	94.86	728	28	0.05	56673	99.09
635	241	0.42	46186	80.76	682	104	0.18	54358	95.05	729	28	0.05	56701	99.14
636	255	0.45	46441	81.20	683	91	0.16	54449	95.21	730	17	0.03	56718	99.17
637	249	0.44	46690	81.64	684	80	0.14	54529	95.35	731	22	0.04	56740	99.21
638	224	0.39	46914	82.03	685	84	0.15	54613	95.49	732	23	0.04	56763	99.25

**Table 181. Mathematics Grade 8 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
733	15	0.03	56778	99.28	780	5	0.01	57121	99.88
734	14	0.02	56792	99.30	781	2	0.00	57123	99.88
735	16	0.03	56808	99.33	782	5	0.01	57128	99.89
736	19	0.03	56827	99.36	783	3	0.01	57131	99.90
737	14	0.02	56841	99.39	785	3	0.01	57134	99.90
738	9	0.02	56850	99.40	786	1	0.00	57135	99.90
739	17	0.03	56867	99.43	787	1	0.00	57136	99.90
740	12	0.02	56879	99.45	788	3	0.01	57139	99.91
741	2	0.00	56881	99.46	790	2	0.00	57141	99.91
742	19	0.03	56900	99.49	791	1	0.00	57142	99.91
743	14	0.02	56914	99.52	792	2	0.00	57144	99.92
744	8	0.01	56922	99.53	793	2	0.00	57146	99.92
745	7	0.01	56929	99.54	794	1	0.00	57147	99.92
746	7	0.01	56936	99.55	795	1	0.00	57148	99.92
747	12	0.02	56948	99.58	796	2	0.00	57150	99.93
748	7	0.01	56955	99.59	797	1	0.00	57151	99.93
749	8	0.01	56963	99.60	798	1	0.00	57152	99.93
750	5	0.01	56968	99.61	799	3	0.01	57155	99.94
751	4	0.01	56972	99.62	802	1	0.00	57156	99.94
752	7	0.01	56979	99.63	804	2	0.00	57158	99.94
753	9	0.02	56988	99.65	810	1	0.00	57159	99.94
754	8	0.01	56996	99.66	811	1	0.00	57160	99.95
755	5	0.01	57001	99.67	812	3	0.01	57163	99.95
756	6	0.01	57007	99.68	817	2	0.00	57165	99.95
757	8	0.01	57015	99.69	818	1	0.00	57166	99.96
758	12	0.02	57027	99.71	821	1	0.00	57167	99.96
759	6	0.01	57033	99.72	823	1	0.00	57168	99.96
760	3	0.01	57036	99.73	827	2	0.00	57170	99.96
761	9	0.02	57045	99.74	831	3	0.01	57173	99.97
762	2	0.00	57047	99.75	832	1	0.00	57174	99.97
763	4	0.01	57051	99.76	834	1	0.00	57175	99.97
764	7	0.01	57058	99.77	838	1	0.00	57176	99.97
765	3	0.01	57061	99.77	840	1	0.00	57177	99.98
766	8	0.01	57069	99.79	845	1	0.00	57178	99.98
767	7	0.01	57076	99.80	846	1	0.00	57179	99.98
768	9	0.02	57085	99.81	856	1	0.00	57180	99.98
769	4	0.01	57089	99.82	862	1	0.00	57181	99.98
770	5	0.01	57094	99.83	865	1	0.00	57182	99.98
771	4	0.01	57098	99.84	878	1	0.00	57183	99.99
772	2	0.00	57100	99.84	879	1	0.00	57184	99.99
773	4	0.01	57104	99.85	887	1	0.00	57185	99.99
774	1	0.00	57105	99.85	890	6	0.01	57191	100
775	3	0.01	57108	99.85					
776	1	0.00	57109	99.86					
777	3	0.01	57112	99.86					
778	3	0.01	57115	99.87					
779	1	0.00	57116	99.87					

**Table 182. Science Grade 8 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
300	444	0.77	444	0.77	347	26	0.05	1087	1.89	394	81	0.14	3296	5.73
301	8	0.01	452	0.79	348	29	0.05	1116	1.94	395	80	0.14	3376	5.87
302	6	0.01	458	0.80	349	30	0.05	1146	1.99	396	81	0.14	3457	6.01
303	9	0.02	467	0.81	350	30	0.05	1176	2.05	397	85	0.15	3542	6.16
304	8	0.01	475	0.83	351	30	0.05	1206	2.10	398	80	0.14	3622	6.30
305	10	0.02	485	0.84	352	30	0.05	1236	2.15	399	84	0.15	3706	6.45
306	8	0.01	493	0.86	353	27	0.05	1263	2.20	400	104	0.18	3810	6.63
307	11	0.02	504	0.88	354	25	0.04	1288	2.24	401	98	0.17	3908	6.80
308	9	0.02	513	0.89	355	20	0.03	1308	2.28	402	97	0.17	4005	6.97
309	7	0.01	520	0.90	356	29	0.05	1337	2.33	403	85	0.15	4090	7.12
310	9	0.02	529	0.92	357	25	0.04	1362	2.37	404	98	0.17	4188	7.29
311	14	0.02	543	0.94	358	30	0.05	1392	2.42	405	98	0.17	4286	7.46
312	9	0.02	552	0.96	359	35	0.06	1427	2.48	406	112	0.19	4398	7.65
313	10	0.02	562	0.98	360	27	0.05	1454	2.53	407	90	0.16	4488	7.81
314	9	0.02	571	0.99	361	44	0.08	1498	2.61	408	115	0.20	4603	8.01
315	8	0.01	579	1.01	362	34	0.06	1532	2.67	409	110	0.19	4713	8.20
316	9	0.02	588	1.02	363	31	0.05	1563	2.72	410	113	0.20	4826	8.40
317	13	0.02	601	1.05	364	27	0.05	1590	2.77	411	118	0.21	4944	8.60
318	13	0.02	614	1.07	365	24	0.04	1614	2.81	412	132	0.23	5076	8.83
319	11	0.02	625	1.09	366	44	0.08	1658	2.88	413	107	0.19	5183	9.02
320	14	0.02	639	1.11	367	44	0.08	1702	2.96	414	116	0.20	5299	9.22
321	6	0.01	645	1.12	368	42	0.07	1744	3.03	415	139	0.24	5438	9.46
322	13	0.02	658	1.14	369	44	0.08	1788	3.11	416	141	0.25	5579	9.71
323	9	0.02	667	1.16	370	44	0.08	1832	3.19	417	129	0.22	5708	9.93
324	8	0.01	675	1.17	371	41	0.07	1873	3.26	418	143	0.25	5851	10.18
325	11	0.02	686	1.19	372	45	0.08	1918	3.34	419	152	0.26	6003	10.44
326	17	0.03	703	1.22	373	49	0.09	1967	3.42	420	141	0.25	6144	10.69
327	13	0.02	716	1.25	374	40	0.07	2007	3.49	421	140	0.24	6284	10.93
328	18	0.03	734	1.28	375	66	0.11	2073	3.61	422	142	0.25	6426	11.18
329	14	0.02	748	1.30	376	44	0.08	2117	3.68	423	146	0.25	6572	11.43
330	14	0.02	762	1.33	377	60	0.10	2177	3.79	424	139	0.24	6711	11.68
331	12	0.02	774	1.35	378	57	0.10	2234	3.89	425	154	0.27	6865	11.94
332	17	0.03	791	1.38	379	47	0.08	2281	3.97	426	162	0.28	7027	12.23
333	26	0.05	817	1.42	380	54	0.09	2335	4.06	427	164	0.29	7191	12.51
334	16	0.03	833	1.45	381	36	0.06	2371	4.13	428	154	0.27	7345	12.78
335	12	0.02	845	1.47	382	59	0.10	2430	4.23	429	160	0.28	7505	13.06
336	14	0.02	859	1.49	383	63	0.11	2493	4.34	430	177	0.31	7682	13.37
337	11	0.02	870	1.51	384	67	0.12	2560	4.45	431	151	0.26	7833	13.63
338	6	0.01	876	1.52	385	64	0.11	2624	4.57	432	165	0.29	7998	13.91
339	22	0.04	898	1.56	386	64	0.11	2688	4.68	433	174	0.30	8172	14.22
340	23	0.04	921	1.60	387	69	0.12	2757	4.80	434	181	0.31	8353	14.53
341	19	0.03	940	1.64	388	80	0.14	2837	4.94	435	194	0.34	8547	14.87
342	26	0.05	966	1.68	389	59	0.10	2896	5.04	436	172	0.30	8719	15.17
343	31	0.05	997	1.73	390	79	0.14	2975	5.18	437	176	0.31	8895	15.48
344	18	0.03	1015	1.77	391	70	0.12	3045	5.30	438	194	0.34	9089	15.81
345	28	0.05	1043	1.81	392	77	0.13	3122	5.43	439	167	0.29	9256	16.10
346	18	0.03	1061	1.85	393	93	0.16	3215	5.59	440	209	0.36	9465	16.47

**Table 182. Science Grade 8 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
441	186	0.32	9651	16.79	488	379	0.66	22578	39.28	535	407	0.71	40839	71.05
442	213	0.37	9864	17.16	489	360	0.63	22938	39.91	536	361	0.63	41200	71.68
443	201	0.35	10065	17.51	490	363	0.63	23301	40.54	537	387	0.67	41587	72.35
444	212	0.37	10277	17.88	491	330	0.57	23631	41.11	538	368	0.64	41955	72.99
445	206	0.36	10483	18.24	492	350	0.61	23981	41.72	539	386	0.67	42341	73.66
446	216	0.38	10699	18.61	493	379	0.66	24360	42.38	540	378	0.66	42719	74.32
447	201	0.35	10900	18.96	494	390	0.68	24750	43.06	541	358	0.62	43077	74.95
448	231	0.40	11131	19.37	495	397	0.69	25147	43.75	542	374	0.65	43451	75.60
449	203	0.35	11334	19.72	496	367	0.64	25514	44.39	543	375	0.65	43826	76.25
450	244	0.42	11578	20.14	497	378	0.66	25892	45.05	544	394	0.69	44220	76.93
451	219	0.38	11797	20.52	498	357	0.62	26249	45.67	545	371	0.65	44591	77.58
452	208	0.36	12005	20.89	499	360	0.63	26609	46.29	546	356	0.62	44947	78.20
453	237	0.41	12242	21.30	500	405	0.70	27014	47.00	547	372	0.65	45319	78.85
454	258	0.45	12500	21.75	501	390	0.68	27404	47.68	548	321	0.56	45640	79.40
455	234	0.41	12734	22.15	502	393	0.68	27797	48.36	549	339	0.59	45979	79.99
456	237	0.41	12971	22.57	503	421	0.73	28218	49.09	550	318	0.55	46297	80.55
457	230	0.40	13201	22.97	504	382	0.66	28600	49.76	551	303	0.53	46600	81.07
458	299	0.52	13500	23.49	505	366	0.64	28966	50.39	552	326	0.57	46926	81.64
459	257	0.45	13757	23.93	506	414	0.72	29380	51.12	553	306	0.53	47232	82.17
460	259	0.45	14016	24.38	507	388	0.68	29768	51.79	554	341	0.59	47573	82.77
461	271	0.47	14287	24.86	508	380	0.66	30148	52.45	555	298	0.52	47871	83.29
462	273	0.47	14560	25.33	509	399	0.69	30547	53.15	556	313	0.54	48184	83.83
463	261	0.45	14821	25.79	510	359	0.62	30906	53.77	557	281	0.49	48465	84.32
464	266	0.46	15087	26.25	511	393	0.68	31299	54.45	558	253	0.44	48718	84.76
465	284	0.49	15371	26.74	512	392	0.68	31691	55.14	559	299	0.52	49017	85.28
466	302	0.53	15673	27.27	513	396	0.69	32087	55.82	560	233	0.41	49250	85.68
467	278	0.48	15951	27.75	514	416	0.72	32503	56.55	561	275	0.48	49525	86.16
468	283	0.49	16234	28.24	515	393	0.68	32896	57.23	562	315	0.55	49840	86.71
469	268	0.47	16502	28.71	516	384	0.67	33280	57.90	563	265	0.46	50105	87.17
470	308	0.54	16810	29.25	517	423	0.74	33703	58.64	564	240	0.42	50345	87.59
471	277	0.48	17087	29.73	518	418	0.73	34121	59.36	565	265	0.46	50610	88.05
472	297	0.52	17384	30.24	519	421	0.73	34542	60.10	566	233	0.41	50843	88.46
473	299	0.52	17683	30.76	520	394	0.69	34936	60.78	567	233	0.41	51076	88.86
474	275	0.48	17958	31.24	521	398	0.69	35334	61.47	568	230	0.40	51306	89.26
475	318	0.55	18276	31.80	522	399	0.69	35733	62.17	569	228	0.40	51534	89.66
476	277	0.48	18553	32.28	523	385	0.67	36118	62.84	570	209	0.36	51743	90.02
477	312	0.54	18865	32.82	524	402	0.70	36520	63.54	571	195	0.34	51938	90.36
478	305	0.53	19170	33.35	525	378	0.66	36898	64.19	572	242	0.42	52180	90.78
479	320	0.56	19490	33.91	526	383	0.67	37281	64.86	573	235	0.41	52415	91.19
480	324	0.56	19814	34.47	527	389	0.68	37670	65.54	574	204	0.35	52619	91.55
481	334	0.58	20148	35.05	528	382	0.66	38052	66.20	575	200	0.35	52819	91.89
482	309	0.54	20457	35.59	529	412	0.72	38464	66.92	576	198	0.34	53017	92.24
483	334	0.58	20791	36.17	530	365	0.64	38829	67.55	577	206	0.36	53223	92.60
484	356	0.62	21147	36.79	531	401	0.70	39230	68.25	578	173	0.30	53396	92.90
485	352	0.61	21499	37.40	532	406	0.71	39636	68.96	579	163	0.28	53559	93.18
486	339	0.59	21838	37.99	533	391	0.68	40027	69.64	580	158	0.27	53717	93.46
487	361	0.63	22199	38.62	534	405	0.70	40432	70.34	581	171	0.30	53888	93.75



**Table 182. Science Grade 8 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
582	143	0.25	54031	94.00	629	16	0.03	57240	99.59	680	1	0.00	57469	99.98
583	138	0.24	54169	94.24	630	18	0.03	57258	99.62	681	1	0.00	57470	99.99
584	132	0.23	54301	94.47	631	16	0.03	57274	99.65	688	3	0.01	57473	99.99
585	127	0.22	54428	94.69	632	11	0.02	57285	99.66	694	1	0.00	57474	99.99
586	144	0.25	54572	94.94	633	13	0.02	57298	99.69	697	1	0.00	57475	99.99
587	132	0.23	54704	95.17	634	7	0.01	57305	99.70	702	1	0.00	57476	100
588	127	0.22	54831	95.39	635	7	0.01	57312	99.71	706	1	0.00	57477	100
589	126	0.22	54957	95.61	636	9	0.02	57321	99.73	713	1	0.00	57478	100
590	119	0.21	55076	95.82	637	10	0.02	57331	99.74					
591	117	0.20	55193	96.02	638	8	0.01	57339	99.76					
592	129	0.22	55322	96.25	639	6	0.01	57345	99.77					
593	126	0.22	55448	96.47	640	9	0.02	57354	99.78					
594	98	0.17	55546	96.64	641	6	0.01	57360	99.79					
595	86	0.15	55632	96.79	642	6	0.01	57366	99.81					
596	112	0.19	55744	96.98	643	8	0.01	57374	99.82					
597	91	0.16	55835	97.14	644	7	0.01	57381	99.83					
598	80	0.14	55915	97.28	645	1	0.00	57382	99.83					
599	81	0.14	55996	97.42	646	5	0.01	57387	99.84					
600	77	0.13	56073	97.56	647	5	0.01	57392	99.85					
601	74	0.13	56147	97.68	648	2	0.00	57394	99.85					
602	65	0.11	56212	97.80	649	6	0.01	57400	99.86					
603	66	0.11	56278	97.91	650	2	0.00	57402	99.87					
604	63	0.11	56341	98.02	651	6	0.01	57408	99.88					
605	73	0.13	56414	98.15	652	8	0.01	57416	99.89					
606	60	0.10	56474	98.25	653	3	0.01	57419	99.90					
607	57	0.10	56531	98.35	654	1	0.00	57420	99.90					
608	56	0.10	56587	98.45	655	5	0.01	57425	99.91					
609	44	0.08	56631	98.53	656	5	0.01	57430	99.92					
610	53	0.09	56684	98.62	657	4	0.01	57434	99.92					
611	42	0.07	56726	98.69	658	4	0.01	57438	99.93					
612	45	0.08	56771	98.77	659	1	0.00	57439	99.93					
613	38	0.07	56809	98.84	660	1	0.00	57440	99.93					
614	35	0.06	56844	98.90	661	2	0.00	57442	99.94					
615	45	0.08	56889	98.98	662	1	0.00	57443	99.94					
616	34	0.06	56923	99.03	663	2	0.00	57445	99.94					
617	27	0.05	56950	99.08	664	1	0.00	57446	99.94					
618	36	0.06	56986	99.14	665	2	0.00	57448	99.95					
619	30	0.05	57016	99.20	666	4	0.01	57452	99.95					
620	35	0.06	57051	99.26	667	4	0.01	57456	99.96					
621	24	0.04	57075	99.30	668	3	0.01	57459	99.97					
622	29	0.05	57104	99.35	669	3	0.01	57462	99.97					
623	24	0.04	57128	99.39	670	1	0.00	57463	99.97					
624	21	0.04	57149	99.43	671	1	0.00	57464	99.98					
625	22	0.04	57171	99.47	673	1	0.00	57465	99.98					
626	23	0.04	57194	99.51	674	1	0.00	57466	99.98					
627	19	0.03	57213	99.54	678	1	0.00	57467	99.98					
628	11	0.02	57224	99.56	679	1	0.00	57468	99.98					

**Table 183. Reading Grade 9 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
350	176	0.30	176	0.30	477	4	0.01	265	0.45	524	19	0.03	698	1.18
410	1	0.00	177	0.30	478	1	0.00	266	0.45	525	18	0.03	716	1.21
413	1	0.00	178	0.30	479	3	0.01	269	0.46	526	28	0.05	744	1.26
415	1	0.00	179	0.30	480	3	0.01	272	0.46	527	23	0.04	767	1.30
416	1	0.00	180	0.30	481	3	0.01	275	0.47	528	17	0.03	784	1.33
417	1	0.00	181	0.31	482	1	0.00	276	0.47	529	20	0.03	804	1.36
420	2	0.00	183	0.31	483	5	0.01	281	0.48	530	27	0.05	831	1.41
425	1	0.00	184	0.31	484	5	0.01	286	0.48	531	18	0.03	849	1.44
427	3	0.01	187	0.32	485	4	0.01	290	0.49	532	22	0.04	871	1.47
428	1	0.00	188	0.32	486	4	0.01	294	0.50	533	33	0.06	904	1.53
429	2	0.00	190	0.32	487	7	0.01	301	0.51	534	38	0.06	942	1.60
430	2	0.00	192	0.33	488	3	0.01	304	0.51	535	41	0.07	983	1.66
434	3	0.01	195	0.33	489	3	0.01	307	0.52	536	25	0.04	1008	1.71
435	1	0.00	196	0.33	490	3	0.01	310	0.52	537	40	0.07	1048	1.77
436	1	0.00	197	0.33	491	7	0.01	317	0.54	538	37	0.06	1085	1.84
438	2	0.00	199	0.34	492	2	0.00	319	0.54	539	56	0.09	1141	1.93
440	2	0.00	201	0.34	493	12	0.02	331	0.56	540	34	0.06	1175	1.99
442	2	0.00	203	0.34	494	7	0.01	338	0.57	541	44	0.07	1219	2.06
443	2	0.00	205	0.35	495	5	0.01	343	0.58	542	37	0.06	1256	2.13
444	2	0.00	207	0.35	496	3	0.01	346	0.59	543	39	0.07	1295	2.19
446	1	0.00	208	0.35	497	8	0.01	354	0.60	544	42	0.07	1337	2.26
447	3	0.01	211	0.36	498	7	0.01	361	0.61	545	42	0.07	1379	2.34
449	1	0.00	212	0.36	499	7	0.01	368	0.62	546	39	0.07	1418	2.40
450	1	0.00	213	0.36	500	8	0.01	376	0.64	547	44	0.07	1462	2.48
451	1	0.00	214	0.36	501	10	0.02	386	0.65	548	75	0.13	1537	2.60
452	3	0.01	217	0.37	502	9	0.02	395	0.67	549	50	0.08	1587	2.69
453	2	0.00	219	0.37	503	13	0.02	408	0.69	550	54	0.09	1641	2.78
454	1	0.00	220	0.37	504	8	0.01	416	0.70	551	46	0.08	1687	2.86
455	2	0.00	222	0.38	505	8	0.01	424	0.72	552	47	0.08	1734	2.94
456	1	0.00	223	0.38	506	10	0.02	434	0.73	553	37	0.06	1771	3.00
457	2	0.00	225	0.38	507	9	0.02	443	0.75	554	49	0.08	1820	3.08
458	3	0.01	228	0.39	508	14	0.02	457	0.77	555	49	0.08	1869	3.16
460	2	0.00	230	0.39	509	13	0.02	470	0.80	556	57	0.10	1926	3.26
461	1	0.00	231	0.39	510	16	0.03	486	0.82	557	58	0.10	1984	3.36
462	2	0.00	233	0.39	511	15	0.03	501	0.85	558	79	0.13	2063	3.49
463	3	0.01	236	0.40	512	15	0.03	516	0.87	559	81	0.14	2144	3.63
464	2	0.00	238	0.40	513	11	0.02	527	0.89	560	73	0.12	2217	3.75
465	2	0.00	240	0.41	514	7	0.01	534	0.90	561	74	0.13	2291	3.88
467	2	0.00	242	0.41	515	16	0.03	550	0.93	562	67	0.11	2358	3.99
468	4	0.01	246	0.42	516	11	0.02	561	0.95	563	80	0.14	2438	4.13
469	1	0.00	247	0.42	517	21	0.04	582	0.99	564	67	0.11	2505	4.24
470	2	0.00	249	0.42	518	15	0.03	597	1.01	565	69	0.12	2574	4.36
471	3	0.01	252	0.43	519	13	0.02	610	1.03	566	99	0.17	2673	4.53
472	1	0.00	253	0.43	520	12	0.02	622	1.05	567	78	0.13	2751	4.66
474	4	0.01	257	0.44	521	16	0.03	638	1.08	568	90	0.15	2841	4.81
475	2	0.00	259	0.44	522	20	0.03	658	1.11	569	72	0.12	2913	4.93
476	2	0.00	261	0.44	523	21	0.04	679	1.15	570	91	0.15	3004	5.09

**Table 183. Reading Grade 9 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
571	95	0.16	3099	5.25	618	253	0.43	10682	18.09	665	476	0.81	29068	49.22
572	79	0.13	3178	5.38	619	248	0.42	10930	18.51	666	515	0.87	29583	50.09
573	82	0.14	3260	5.52	620	214	0.36	11144	18.87	667	477	0.81	30060	50.90
574	102	0.17	3362	5.69	621	270	0.46	11414	19.33	668	504	0.85	30564	51.75
575	88	0.15	3450	5.84	622	288	0.49	11702	19.82	669	515	0.87	31079	52.63
576	107	0.18	3557	6.02	623	269	0.46	11971	20.27	670	496	0.84	31575	53.47
577	93	0.16	3650	6.18	624	306	0.52	12277	20.79	671	542	0.92	32117	54.38
578	119	0.20	3769	6.38	625	300	0.51	12577	21.30	672	490	0.83	32607	55.21
579	106	0.18	3875	6.56	626	365	0.62	12942	21.91	673	551	0.93	33158	56.15
580	109	0.18	3984	6.75	627	304	0.51	13246	22.43	674	475	0.80	33633	56.95
581	115	0.19	4099	6.94	628	318	0.54	13564	22.97	675	509	0.86	34142	57.81
582	121	0.20	4220	7.15	629	298	0.50	13862	23.47	676	559	0.95	34701	58.76
583	104	0.18	4324	7.32	630	317	0.54	14179	24.01	677	504	0.85	35205	59.61
584	120	0.20	4444	7.53	631	339	0.57	14518	24.58	678	522	0.88	35727	60.50
585	135	0.23	4579	7.75	632	358	0.61	14876	25.19	679	520	0.88	36247	61.38
586	147	0.25	4726	8.00	633	345	0.58	15221	25.77	680	488	0.83	36735	62.20
587	126	0.21	4852	8.22	634	358	0.61	15579	26.38	681	528	0.89	37263	63.10
588	157	0.27	5009	8.48	635	346	0.59	15925	26.97	682	478	0.81	37741	63.91
589	143	0.24	5152	8.72	636	348	0.59	16273	27.56	683	491	0.83	38232	64.74
590	127	0.22	5279	8.94	637	358	0.61	16631	28.16	684	504	0.85	38736	65.59
591	122	0.21	5401	9.15	638	369	0.62	17000	28.79	685	544	0.92	39280	66.51
592	160	0.27	5561	9.42	639	388	0.66	17388	29.44	686	488	0.83	39768	67.34
593	139	0.24	5700	9.65	640	398	0.67	17786	30.12	687	461	0.78	40229	68.12
594	146	0.25	5846	9.90	641	402	0.68	18188	30.80	688	472	0.80	40701	68.92
595	145	0.25	5991	10.14	642	426	0.72	18614	31.52	689	475	0.80	41176	69.72
596	176	0.30	6167	10.44	643	423	0.72	19037	32.24	690	540	0.91	41716	70.64
597	176	0.30	6343	10.74	644	370	0.63	19407	32.86	691	476	0.81	42192	71.44
598	175	0.30	6518	11.04	645	438	0.74	19845	33.60	692	492	0.83	42684	72.28
599	166	0.28	6684	11.32	646	377	0.64	20222	34.24	693	438	0.74	43122	73.02
600	164	0.28	6848	11.60	647	422	0.71	20644	34.96	694	452	0.77	43574	73.78
601	173	0.29	7021	11.89	648	427	0.72	21071	35.68	695	444	0.75	44018	74.54
602	180	0.30	7201	12.19	649	438	0.74	21509	36.42	696	451	0.76	44469	75.30
603	173	0.29	7374	12.49	650	469	0.79	21978	37.22	697	479	0.81	44948	76.11
604	190	0.32	7564	12.81	651	428	0.72	22406	37.94	698	417	0.71	45365	76.82
605	220	0.37	7784	13.18	652	459	0.78	22865	38.72	699	453	0.77	45818	77.58
606	188	0.32	7972	13.50	653	435	0.74	23300	39.45	700	417	0.71	46235	78.29
607	203	0.34	8175	13.84	654	450	0.76	23750	40.22	701	358	0.61	46593	78.90
608	223	0.38	8398	14.22	655	460	0.78	24210	40.99	702	415	0.70	47008	79.60
609	182	0.31	8580	14.53	656	444	0.75	24654	41.75	703	423	0.72	47431	80.32
610	223	0.38	8803	14.91	657	514	0.87	25168	42.62	704	409	0.69	47840	81.01
611	224	0.38	9027	15.29	658	478	0.81	25646	43.43	705	388	0.66	48228	81.66
612	205	0.35	9232	15.63	659	469	0.79	26115	44.22	706	391	0.66	48619	82.33
613	225	0.38	9457	16.01	660	509	0.86	26624	45.08	707	385	0.65	49004	82.98
614	262	0.44	9719	16.46	661	479	0.81	27103	45.89	708	348	0.59	49352	83.57
615	227	0.38	9946	16.84	662	497	0.84	27600	46.74	709	341	0.58	49693	84.15
616	240	0.41	10186	17.25	663	502	0.85	28102	47.59	710	337	0.57	50030	84.72
617	243	0.41	10429	17.66	664	490	0.83	28592	48.42	711	362	0.61	50392	85.33

**Table 183. Reading Grade 9 Scale Score Distribution (continued)**

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
712	346	0.59	50738	85.92	759	53	0.09	58271	98.67	806	1	0.00	59003	99.91
713	275	0.47	51013	86.38	760	46	0.08	58317	98.75	807	1	0.00	59004	99.91
714	301	0.51	51314	86.89	761	46	0.08	58363	98.83	808	3	0.01	59007	99.92
715	303	0.51	51617	87.40	762	37	0.06	58400	98.89	809	4	0.01	59011	99.92
716	273	0.46	51890	87.87	763	34	0.06	58434	98.95	810	3	0.01	59014	99.93
717	314	0.53	52204	88.40	764	23	0.04	58457	98.99	811	1	0.00	59015	99.93
718	277	0.47	52481	88.87	765	35	0.06	58492	99.04	813	2	0.00	59017	99.93
719	248	0.42	52729	89.29	766	31	0.05	58523	99.10	814	3	0.01	59020	99.94
720	251	0.43	52980	89.71	767	38	0.06	58561	99.16	815	2	0.00	59022	99.94
721	257	0.44	53237	90.15	768	25	0.04	58586	99.20	816	2	0.00	59024	99.95
722	227	0.38	53464	90.53	769	29	0.05	58615	99.25	817	5	0.01	59029	99.95
723	252	0.43	53716	90.96	770	36	0.06	58651	99.31	818	1	0.00	59030	99.96
724	250	0.42	53966	91.38	771	19	0.03	58670	99.35	819	4	0.01	59034	99.96
725	209	0.35	54175	91.73	772	21	0.04	58691	99.38	820	2	0.00	59036	99.97
726	199	0.34	54374	92.07	773	29	0.05	58720	99.43	821	1	0.00	59037	99.97
727	174	0.29	54548	92.37	774	24	0.04	58744	99.47	822	4	0.01	59041	99.97
728	188	0.32	54736	92.68	775	22	0.04	58766	99.51	824	1	0.00	59042	99.98
729	178	0.30	54914	92.99	776	18	0.03	58784	99.54	825	1	0.00	59043	99.98
730	194	0.33	55108	93.31	777	17	0.03	58801	99.57	827	2	0.00	59045	99.98
731	173	0.29	55281	93.61	778	18	0.03	58819	99.60	828	2	0.00	59047	99.98
732	172	0.29	55453	93.90	779	16	0.03	58835	99.63	830	1	0.00	59048	99.99
733	166	0.28	55619	94.18	780	16	0.03	58851	99.65	834	1	0.00	59049	99.99
734	153	0.26	55772	94.44	781	14	0.02	58865	99.68	838	1	0.00	59050	99.99
735	173	0.29	55945	94.73	782	14	0.02	58879	99.70	841	1	0.00	59051	99.99
736	157	0.27	56102	95.00	783	8	0.01	58887	99.71	846	1	0.00	59052	99.99
737	161	0.27	56263	95.27	784	14	0.02	58901	99.74	848	1	0.00	59053	99.99
738	140	0.24	56403	95.51	785	12	0.02	58913	99.76	861	1	0.00	59054	100
739	146	0.25	56549	95.75	786	9	0.02	58922	99.77	867	1	0.00	59055	100
740	114	0.19	56663	95.95	787	7	0.01	58929	99.78	895	1	0.00	59056	100
741	119	0.20	56782	96.15	788	6	0.01	58935	99.80					
742	108	0.18	56890	96.33	789	7	0.01	58942	99.81					
743	100	0.17	56990	96.50	790	7	0.01	58949	99.82					
744	120	0.20	57110	96.70	791	7	0.01	58956	99.83					
745	115	0.19	57225	96.90	792	7	0.01	58963	99.84					
746	111	0.19	57336	97.09	793	6	0.01	58969	99.85					
747	104	0.18	57440	97.26	794	4	0.01	58973	99.86					
748	81	0.14	57521	97.40	795	3	0.01	58976	99.86					
749	81	0.14	57602	97.54	796	1	0.00	58977	99.87					
750	63	0.11	57665	97.64	797	5	0.01	58982	99.87					
751	90	0.15	57755	97.80	798	4	0.01	58986	99.88					
752	90	0.15	57845	97.95	799	1	0.00	58987	99.88					
753	65	0.11	57910	98.06	800	4	0.01	58991	99.89					
754	59	0.10	57969	98.16	801	2	0.00	58993	99.89					
755	65	0.11	58034	98.27	802	3	0.01	58996	99.90					
756	64	0.11	58098	98.38	803	1	0.00	58997	99.90					
757	63	0.11	58161	98.48	804	3	0.01	59000	99.91					
758	57	0.10	58218	98.58	805	2	0.00	59002	99.91					

**Table 184. Writing Grade 9 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
260	78	0.13	78	0.13	320	4	0.01	166	0.28	367	22	0.04	556	0.94
262	1	0.00	79	0.13	321	3	0.01	169	0.29	368	16	0.03	572	0.97
263	2	0.00	81	0.14	322	1	0.00	170	0.29	369	16	0.03	588	0.99
264	1	0.00	82	0.14	323	2	0.00	172	0.29	370	21	0.04	609	1.03
266	2	0.00	84	0.14	324	6	0.01	178	0.30	371	16	0.03	625	1.06
267	1	0.00	85	0.14	325	2	0.00	180	0.30	372	21	0.04	646	1.09
268	1	0.00	86	0.15	326	8	0.01	188	0.32	373	26	0.04	672	1.14
269	2	0.00	88	0.15	327	5	0.01	193	0.33	374	18	0.03	690	1.17
270	1	0.00	89	0.15	328	6	0.01	199	0.34	375	13	0.02	703	1.19
271	1	0.00	90	0.15	329	5	0.01	204	0.35	376	24	0.04	727	1.23
274	3	0.01	93	0.16	330	2	0.00	206	0.35	377	19	0.03	746	1.26
276	1	0.00	94	0.16	331	8	0.01	214	0.36	378	18	0.03	764	1.29
277	1	0.00	95	0.16	332	5	0.01	219	0.37	379	22	0.04	786	1.33
279	2	0.00	97	0.16	333	6	0.01	225	0.38	380	19	0.03	805	1.36
280	1	0.00	98	0.17	334	6	0.01	231	0.39	381	22	0.04	827	1.40
282	1	0.00	99	0.17	335	5	0.01	236	0.40	382	19	0.03	846	1.43
283	1	0.00	100	0.17	336	9	0.02	245	0.41	383	21	0.04	867	1.47
284	1	0.00	101	0.17	337	4	0.01	249	0.42	384	19	0.03	886	1.50
285	3	0.01	104	0.18	338	10	0.02	259	0.44	385	27	0.05	913	1.54
286	1	0.00	105	0.18	339	3	0.01	262	0.44	386	20	0.03	933	1.58
287	2	0.00	107	0.18	340	7	0.01	269	0.46	387	33	0.06	966	1.63
288	1	0.00	108	0.18	341	6	0.01	275	0.47	388	26	0.04	992	1.68
289	2	0.00	110	0.19	342	10	0.02	285	0.48	389	31	0.05	1023	1.73
290	2	0.00	112	0.19	343	8	0.01	293	0.50	390	35	0.06	1058	1.79
291	1	0.00	113	0.19	344	6	0.01	299	0.51	391	24	0.04	1082	1.83
292	1	0.00	114	0.19	345	5	0.01	304	0.51	392	27	0.05	1109	1.88
293	1	0.00	115	0.19	346	9	0.02	313	0.53	393	27	0.05	1136	1.92
294	4	0.01	119	0.20	347	8	0.01	321	0.54	394	29	0.05	1165	1.97
295	4	0.01	123	0.21	348	13	0.02	334	0.57	395	30	0.05	1195	2.02
296	1	0.00	124	0.21	349	12	0.02	346	0.59	396	27	0.05	1222	2.07
298	4	0.01	128	0.22	350	10	0.02	356	0.60	397	39	0.07	1261	2.13
299	2	0.00	130	0.22	351	7	0.01	363	0.61	398	26	0.04	1287	2.18
300	1	0.00	131	0.22	352	8	0.01	371	0.63	399	34	0.06	1321	2.24
301	3	0.01	134	0.23	353	12	0.02	383	0.65	400	37	0.06	1358	2.30
303	1	0.00	135	0.23	354	13	0.02	396	0.67	401	36	0.06	1394	2.36
304	4	0.01	139	0.24	355	10	0.02	406	0.69	402	43	0.07	1437	2.43
306	1	0.00	140	0.24	356	11	0.02	417	0.71	403	35	0.06	1472	2.49
308	1	0.00	141	0.24	357	7	0.01	424	0.72	404	34	0.06	1506	2.55
309	1	0.00	142	0.24	358	11	0.02	435	0.74	405	38	0.06	1544	2.61
310	2	0.00	144	0.24	359	13	0.02	448	0.76	406	31	0.05	1575	2.67
311	4	0.01	148	0.25	360	13	0.02	461	0.78	407	32	0.05	1607	2.72
312	2	0.00	150	0.25	361	14	0.02	475	0.80	408	38	0.06	1645	2.78
315	4	0.01	154	0.26	362	8	0.01	483	0.82	409	53	0.09	1698	2.87
316	4	0.01	158	0.27	363	9	0.02	492	0.83	410	54	0.09	1752	2.96
317	2	0.00	160	0.27	364	14	0.02	506	0.86	411	45	0.08	1797	3.04
318	1	0.00	161	0.27	365	15	0.03	521	0.88	412	45	0.08	1842	3.12
319	1	0.00	162	0.27	366	13	0.02	534	0.90	413	66	0.11	1908	3.23

**Table 184. Writing Grade 9 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
414	45	0.08	1953	3.30	461	108	0.18	5793	9.80	508	206	0.35	14070	23.81
415	50	0.08	2003	3.39	462	126	0.21	5919	10.02	509	219	0.37	14289	24.18
416	43	0.07	2046	3.46	463	116	0.20	6035	10.21	510	252	0.43	14541	24.60
417	43	0.07	2089	3.53	464	124	0.21	6159	10.42	511	237	0.40	14778	25.01
418	36	0.06	2125	3.60	465	157	0.27	6316	10.69	512	225	0.38	15003	25.39
419	63	0.11	2188	3.70	466	160	0.27	6476	10.96	513	245	0.41	15248	25.80
420	60	0.10	2248	3.80	467	127	0.21	6603	11.17	514	243	0.41	15491	26.21
421	46	0.08	2294	3.88	468	180	0.30	6783	11.48	515	261	0.44	15752	26.65
422	73	0.12	2367	4.01	469	148	0.25	6931	11.73	516	231	0.39	15983	27.04
423	62	0.10	2429	4.11	470	159	0.27	7090	12.00	517	241	0.41	16224	27.45
424	63	0.11	2492	4.22	471	157	0.27	7247	12.26	518	238	0.40	16462	27.86
425	53	0.09	2545	4.31	472	147	0.25	7394	12.51	519	256	0.43	16718	28.29
426	76	0.13	2621	4.44	473	148	0.25	7542	12.76	520	258	0.44	16976	28.73
427	72	0.12	2693	4.56	474	145	0.25	7687	13.01	521	247	0.42	17223	29.14
428	56	0.09	2749	4.65	475	142	0.24	7829	13.25	522	264	0.45	17487	29.59
429	56	0.09	2805	4.75	476	139	0.24	7968	13.48	523	281	0.48	17768	30.07
430	71	0.12	2876	4.87	477	163	0.28	8131	13.76	524	284	0.48	18052	30.55
431	67	0.11	2943	4.98	478	159	0.27	8290	14.03	525	307	0.52	18359	31.07
432	71	0.12	3014	5.10	479	169	0.29	8459	14.31	526	278	0.47	18637	31.54
433	75	0.13	3089	5.23	480	173	0.29	8632	14.61	527	250	0.42	18887	31.96
434	71	0.12	3160	5.35	481	165	0.28	8797	14.89	528	301	0.51	19188	32.47
435	68	0.12	3228	5.46	482	173	0.29	8970	15.18	529	278	0.47	19466	32.94
436	91	0.15	3319	5.62	483	186	0.31	9156	15.49	530	315	0.53	19781	33.47
437	76	0.13	3395	5.74	484	155	0.26	9311	15.76	531	309	0.52	20090	33.99
438	70	0.12	3465	5.86	485	194	0.33	9505	16.08	532	294	0.50	20384	34.49
439	76	0.13	3541	5.99	486	194	0.33	9699	16.41	533	286	0.48	20670	34.98
440	81	0.14	3622	6.13	487	178	0.30	9877	16.71	534	300	0.51	20970	35.48
441	91	0.15	3713	6.28	488	169	0.29	10046	17.00	535	271	0.46	21241	35.94
442	90	0.15	3803	6.44	489	200	0.34	10246	17.34	536	300	0.51	21541	36.45
443	93	0.16	3896	6.59	490	192	0.32	10438	17.66	537	323	0.55	21864	37.00
444	98	0.17	3994	6.76	491	196	0.33	10634	17.99	538	298	0.50	22162	37.50
445	96	0.16	4090	6.92	492	168	0.28	10802	18.28	539	324	0.55	22486	38.05
446	89	0.15	4179	7.07	493	180	0.30	10982	18.58	540	286	0.48	22772	38.53
447	109	0.18	4288	7.26	494	172	0.29	11154	18.87	541	312	0.53	23084	39.06
448	106	0.18	4394	7.44	495	193	0.33	11347	19.20	542	311	0.53	23395	39.59
449	102	0.17	4496	7.61	496	183	0.31	11530	19.51	543	306	0.52	23701	40.10
450	98	0.17	4594	7.77	497	175	0.30	11705	19.81	544	313	0.53	24014	40.63
451	104	0.18	4698	7.95	498	223	0.38	11928	20.18	545	280	0.47	24294	41.11
452	120	0.20	4818	8.15	499	220	0.37	12148	20.56	546	297	0.50	24591	41.61
453	94	0.16	4912	8.31	500	201	0.34	12349	20.90	547	289	0.49	24880	42.10
454	99	0.17	5011	8.48	501	208	0.35	12557	21.25	548	283	0.48	25163	42.58
455	106	0.18	5117	8.66	502	194	0.33	12751	21.58	549	336	0.57	25499	43.15
456	101	0.17	5218	8.83	503	201	0.34	12952	21.92	550	313	0.53	25812	43.68
457	118	0.20	5336	9.03	504	216	0.37	13168	22.28	551	294	0.50	26106	44.17
458	127	0.21	5463	9.24	505	235	0.40	13403	22.68	552	333	0.56	26439	44.74
459	123	0.21	5586	9.45	506	227	0.38	13630	23.06	553	284	0.48	26723	45.22
460	99	0.17	5685	9.62	507	234	0.40	13864	23.46	554	316	0.53	27039	45.75

**Table 184. Writing Grade 9 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
555	332	0.56	27371	46.31	602	278	0.47	41913	70.92	649	156	0.26	51996	87.98
556	324	0.55	27695	46.86	603	280	0.47	42193	71.39	650	163	0.28	52159	88.26
557	296	0.50	27991	47.36	604	274	0.46	42467	71.86	651	143	0.24	52302	88.50
558	317	0.54	28308	47.90	605	250	0.42	42717	72.28	652	139	0.24	52441	88.74
559	325	0.55	28633	48.45	606	256	0.43	42973	72.71	653	150	0.25	52591	88.99
560	322	0.54	28955	48.99	607	284	0.48	43257	73.20	654	135	0.23	52726	89.22
561	325	0.55	29280	49.54	608	299	0.51	43556	73.70	655	123	0.21	52849	89.43
562	336	0.57	29616	50.11	609	244	0.41	43800	74.11	656	140	0.24	52989	89.66
563	320	0.54	29936	50.65	610	257	0.43	44057	74.55	657	121	0.20	53110	89.87
564	329	0.56	30265	51.21	611	248	0.42	44305	74.97	658	116	0.20	53226	90.06
565	342	0.58	30607	51.79	612	235	0.40	44540	75.37	659	146	0.25	53372	90.31
566	339	0.57	30946	52.36	613	243	0.41	44783	75.78	660	123	0.21	53495	90.52
567	319	0.54	31265	52.90	614	247	0.42	45030	76.20	661	121	0.20	53616	90.72
568	304	0.51	31569	53.42	615	258	0.44	45288	76.63	662	114	0.19	53730	90.92
569	305	0.52	31874	53.93	616	243	0.41	45531	77.04	663	120	0.20	53850	91.12
570	309	0.52	32183	54.46	617	239	0.40	45770	77.45	664	103	0.17	53953	91.29
571	337	0.57	32520	55.03	618	243	0.41	46013	77.86	665	110	0.19	54063	91.48
572	354	0.60	32874	55.63	619	244	0.41	46257	78.27	666	113	0.19	54176	91.67
573	311	0.53	33185	56.15	620	216	0.37	46473	78.64	667	116	0.20	54292	91.87
574	328	0.56	33513	56.71	621	226	0.38	46699	79.02	668	110	0.19	54402	92.05
575	292	0.49	33805	57.20	622	249	0.42	46948	79.44	669	99	0.17	54501	92.22
576	302	0.51	34107	57.71	623	240	0.41	47188	79.85	670	103	0.17	54604	92.40
577	316	0.53	34423	58.25	624	246	0.42	47434	80.26	671	97	0.16	54701	92.56
578	333	0.56	34756	58.81	625	220	0.37	47654	80.64	672	101	0.17	54802	92.73
579	314	0.53	35070	59.34	626	212	0.36	47866	80.99	673	83	0.14	54885	92.87
580	340	0.58	35410	59.92	627	229	0.39	48095	81.38	674	107	0.18	54992	93.05
581	327	0.55	35737	60.47	628	219	0.37	48314	81.75	675	104	0.18	55096	93.23
582	266	0.45	36003	60.92	629	212	0.36	48526	82.11	676	72	0.12	55168	93.35
583	281	0.48	36284	61.40	630	197	0.33	48723	82.44	677	79	0.13	55247	93.48
584	321	0.54	36605	61.94	631	224	0.38	48947	82.82	678	89	0.15	55336	93.63
585	300	0.51	36905	62.45	632	182	0.31	49129	83.13	679	95	0.16	55431	93.80
586	317	0.54	37222	62.98	633	183	0.31	49312	83.44	680	87	0.15	55518	93.94
587	307	0.52	37529	63.50	634	190	0.32	49502	83.76	681	90	0.15	55608	94.09
588	280	0.47	37809	63.98	635	201	0.34	49703	84.10	682	76	0.13	55684	94.22
589	329	0.56	38138	64.53	636	167	0.28	49870	84.39	683	84	0.14	55768	94.37
590	303	0.51	38441	65.05	637	178	0.30	50048	84.69	684	72	0.12	55840	94.49
591	298	0.50	38739	65.55	638	180	0.30	50228	84.99	685	74	0.13	55914	94.61
592	324	0.55	39063	66.10	639	170	0.29	50398	85.28	686	75	0.13	55989	94.74
593	300	0.51	39363	66.61	640	171	0.29	50569	85.57	687	74	0.13	56063	94.86
594	300	0.51	39663	67.11	641	198	0.34	50767	85.90	688	74	0.13	56137	94.99
595	288	0.49	39951	67.60	642	156	0.26	50923	86.17	689	73	0.12	56210	95.11
596	277	0.47	40228	68.07	643	152	0.26	51075	86.42	690	62	0.10	56272	95.22
597	249	0.42	40477	68.49	644	173	0.29	51248	86.72	691	65	0.11	56337	95.33
598	279	0.47	40756	68.96	645	136	0.23	51384	86.95	692	65	0.11	56402	95.44
599	293	0.50	41049	69.46	646	164	0.28	51548	87.22	693	67	0.11	56469	95.55
600	289	0.49	41338	69.95	647	150	0.25	51698	87.48	694	51	0.09	56520	95.64
601	297	0.50	41635	70.45	648	142	0.24	51840	87.72	695	56	0.09	56576	95.73

**Table 184. Writing Grade 9 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
696	62	0.10	56638	95.84	743	17	0.03	58318	98.68	790	19	0.03	58823	99.53
697	42	0.07	56680	95.91	744	13	0.02	58331	98.70	791	2	0.00	58825	99.54
698	56	0.09	56736	96.00	745	20	0.03	58351	98.74	792	2	0.00	58827	99.54
699	55	0.09	56791	96.10	746	13	0.02	58364	98.76	793	6	0.01	58833	99.55
700	59	0.10	56850	96.20	747	9	0.02	58373	98.77	794	7	0.01	58840	99.56
701	56	0.09	56906	96.29	748	21	0.04	58394	98.81	795	3	0.01	58843	99.57
702	46	0.08	56952	96.37	749	6	0.01	58400	98.82	796	7	0.01	58850	99.58
703	45	0.08	56997	96.44	750	28	0.05	58428	98.87	797	2	0.00	58852	99.58
704	49	0.08	57046	96.53	751	15	0.03	58443	98.89	798	5	0.01	58857	99.59
705	65	0.11	57111	96.64	752	12	0.02	58455	98.91	799	2	0.00	58859	99.60
706	47	0.08	57158	96.72	753	15	0.03	58470	98.94	800	2	0.00	58861	99.60
707	61	0.10	57219	96.82	754	14	0.02	58484	98.96	801	7	0.01	58868	99.61
708	40	0.07	57259	96.89	755	7	0.01	58491	98.97	802	12	0.02	58880	99.63
709	35	0.06	57294	96.95	756	14	0.02	58505	99.00	804	3	0.01	58883	99.64
710	35	0.06	57329	97.01	757	21	0.04	58526	99.03	805	6	0.01	58889	99.65
711	42	0.07	57371	97.08	758	10	0.02	58536	99.05	806	4	0.01	58893	99.65
712	44	0.07	57415	97.15	759	12	0.02	58548	99.07	807	2	0.00	58895	99.66
713	39	0.07	57454	97.22	760	6	0.01	58554	99.08	808	4	0.01	58899	99.66
714	40	0.07	57494	97.29	761	13	0.02	58567	99.10	809	1	0.00	58900	99.66
715	39	0.07	57533	97.35	762	13	0.02	58580	99.12	810	3	0.01	58903	99.67
716	31	0.05	57564	97.40	763	13	0.02	58593	99.15	811	15	0.03	58918	99.70
717	38	0.06	57602	97.47	764	12	0.02	58605	99.17	812	3	0.01	58921	99.70
718	33	0.06	57635	97.52	765	10	0.02	58615	99.18	813	1	0.00	58922	99.70
719	40	0.07	57675	97.59	766	10	0.02	58625	99.20	815	2	0.00	58924	99.71
720	35	0.06	57710	97.65	767	5	0.01	58630	99.21	816	12	0.02	58936	99.73
721	27	0.05	57737	97.70	768	13	0.02	58643	99.23	817	3	0.01	58939	99.73
722	38	0.06	57775	97.76	769	7	0.01	58650	99.24	818	3	0.01	58942	99.74
723	31	0.05	57806	97.81	770	7	0.01	58657	99.25	819	3	0.01	58945	99.74
724	28	0.05	57834	97.86	771	25	0.04	58682	99.30	820	1	0.00	58946	99.74
725	32	0.05	57866	97.92	772	6	0.01	58688	99.31	821	3	0.01	58949	99.75
726	28	0.05	57894	97.96	773	8	0.01	58696	99.32	822	4	0.01	58953	99.75
727	34	0.06	57928	98.02	774	13	0.02	58709	99.34	823	4	0.01	58957	99.76
728	27	0.05	57955	98.07	775	6	0.01	58715	99.35	825	5	0.01	58962	99.77
729	40	0.07	57995	98.13	776	4	0.01	58719	99.36	826	2	0.00	58964	99.77
730	31	0.05	58026	98.19	777	4	0.01	58723	99.37	827	3	0.01	58967	99.78
731	26	0.04	58052	98.23	778	7	0.01	58730	99.38	828	5	0.01	58972	99.79
732	20	0.03	58072	98.26	779	6	0.01	58736	99.39	829	1	0.00	58973	99.79
733	24	0.04	58096	98.30	780	6	0.01	58742	99.40	830	1	0.00	58974	99.79
734	19	0.03	58115	98.34	781	4	0.01	58746	99.40	831	3	0.01	58977	99.80
735	31	0.05	58146	98.39	782	10	0.02	58756	99.42	832	3	0.01	58980	99.80
736	28	0.05	58174	98.44	783	6	0.01	58762	99.43	834	2	0.00	58982	99.80
737	28	0.05	58202	98.48	784	10	0.02	58772	99.45	835	4	0.01	58986	99.81
738	13	0.02	58215	98.51	785	9	0.02	58781	99.46	838	2	0.00	58988	99.81
739	18	0.03	58233	98.54	786	6	0.01	58787	99.47	840	2	0.00	58990	99.82
740	28	0.05	58261	98.58	787	4	0.01	58791	99.48	845	6	0.01	58996	99.83
741	19	0.03	58280	98.62	788	4	0.01	58795	99.49	846	2	0.00	58998	99.83
742	21	0.04	58301	98.65	789	9	0.02	58804	99.50	847	8	0.01	59006	99.84



**Table 184. Writing Grade 9 Scale Score Distribution (continued)**

<b>SS</b>	<b>Freq</b>	<b>%</b>	<b>Cum. Freq.</b>	<b>Cum. %</b>
848	9	0.02	59015	99.86
852	2	0.00	59017	99.86
854	1	0.00	59018	99.86
859	2	0.00	59020	99.87
862	1	0.00	59021	99.87
863	11	0.02	59032	99.89
864	3	0.01	59035	99.89
868	1	0.00	59036	99.90
872	4	0.01	59040	99.90
880	2	0.00	59042	99.91
881	7	0.01	59049	99.92
882	5	0.01	59054	99.93
889	2	0.00	59056	99.93
893	8	0.01	59064	99.94
900	5	0.01	59069	99.95
903	1	0.00	59070	99.95
908	3	0.01	59073	99.96
930	25	0.04	59098	100

**Table 185. Mathematics Grade 9 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
340	668	1.13	668	1.13	387	17	0.03	1045	1.77	434	30	0.05	2216	3.75
341	3	0.01	671	1.13	388	16	0.03	1061	1.79	435	33	0.06	2249	3.80
342	5	0.01	676	1.14	389	24	0.04	1085	1.83	436	47	0.08	2296	3.88
343	3	0.01	679	1.15	390	14	0.02	1099	1.86	437	34	0.06	2330	3.94
344	5	0.01	684	1.16	391	11	0.02	1110	1.88	438	46	0.08	2376	4.02
345	5	0.01	689	1.16	392	16	0.03	1126	1.90	439	46	0.08	2422	4.10
346	6	0.01	695	1.18	393	6	0.01	1132	1.91	440	54	0.09	2476	4.19
347	2	0.00	697	1.18	394	23	0.04	1155	1.95	441	46	0.08	2522	4.26
348	4	0.01	701	1.19	395	16	0.03	1171	1.98	442	58	0.10	2580	4.36
349	8	0.01	709	1.20	396	18	0.03	1189	2.01	443	48	0.08	2628	4.44
350	4	0.01	713	1.21	397	17	0.03	1206	2.04	444	41	0.07	2669	4.51
351	6	0.01	719	1.22	398	14	0.02	1220	2.06	445	41	0.07	2710	4.58
352	1	0.00	720	1.22	399	19	0.03	1239	2.09	446	59	0.10	2769	4.68
353	8	0.01	728	1.23	400	17	0.03	1256	2.12	447	58	0.10	2827	4.78
354	4	0.01	732	1.24	401	13	0.02	1269	2.15	448	44	0.07	2871	4.85
355	5	0.01	737	1.25	402	22	0.04	1291	2.18	449	58	0.10	2929	4.95
356	6	0.01	743	1.26	403	20	0.03	1311	2.22	450	64	0.11	2993	5.06
357	3	0.01	746	1.26	404	21	0.04	1332	2.25	451	46	0.08	3039	5.14
358	7	0.01	753	1.27	405	22	0.04	1354	2.29	452	46	0.08	3085	5.22
359	7	0.01	760	1.28	406	19	0.03	1373	2.32	453	56	0.09	3141	5.31
360	12	0.02	772	1.31	407	32	0.05	1405	2.38	454	54	0.09	3195	5.40
361	6	0.01	778	1.32	408	22	0.04	1427	2.41	455	66	0.11	3261	5.51
362	15	0.03	793	1.34	409	23	0.04	1450	2.45	456	43	0.07	3304	5.59
363	6	0.01	799	1.35	410	14	0.02	1464	2.48	457	47	0.08	3351	5.67
364	6	0.01	805	1.36	411	22	0.04	1486	2.51	458	67	0.11	3418	5.78
365	10	0.02	815	1.38	412	24	0.04	1510	2.55	459	62	0.10	3480	5.88
366	4	0.01	819	1.38	413	24	0.04	1534	2.59	460	55	0.09	3535	5.98
367	6	0.01	825	1.39	414	27	0.05	1561	2.64	461	55	0.09	3590	6.07
368	12	0.02	837	1.42	415	22	0.04	1583	2.68	462	76	0.13	3666	6.20
369	7	0.01	844	1.43	416	24	0.04	1607	2.72	463	65	0.11	3731	6.31
370	10	0.02	854	1.44	417	24	0.04	1631	2.76	464	81	0.14	3812	6.45
371	10	0.02	864	1.46	418	31	0.05	1662	2.81	465	65	0.11	3877	6.56
372	3	0.01	867	1.47	419	29	0.05	1691	2.86	466	89	0.15	3966	6.71
373	13	0.02	880	1.49	420	26	0.04	1717	2.90	467	90	0.15	4056	6.86
374	13	0.02	893	1.51	421	27	0.05	1744	2.95	468	70	0.12	4126	6.98
375	13	0.02	906	1.53	422	29	0.05	1773	3.00	469	85	0.14	4211	7.12
376	13	0.02	919	1.55	423	28	0.05	1801	3.05	470	81	0.14	4292	7.26
377	10	0.02	929	1.57	424	32	0.05	1833	3.10	471	99	0.17	4391	7.42
378	12	0.02	941	1.59	425	38	0.06	1871	3.16	472	90	0.15	4481	7.58
379	6	0.01	947	1.60	426	38	0.06	1909	3.23	473	77	0.13	4558	7.71
380	12	0.02	959	1.62	427	44	0.07	1953	3.30	474	77	0.13	4635	7.84
381	8	0.01	967	1.63	428	32	0.05	1985	3.36	475	87	0.15	4722	7.98
382	16	0.03	983	1.66	429	39	0.07	2024	3.42	476	82	0.14	4804	8.12
383	12	0.02	995	1.68	430	38	0.06	2062	3.49	477	92	0.16	4896	8.28
384	10	0.02	1005	1.70	431	32	0.05	2094	3.54	478	88	0.15	4984	8.43
385	10	0.02	1015	1.72	432	44	0.07	2138	3.61	479	95	0.16	5079	8.59
386	13	0.02	1028	1.74	433	48	0.08	2186	3.70	480	113	0.19	5192	8.78

**Table 185. Mathematics Grade 9 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
481	104	0.18	5296	8.95	528	231	0.39	12801	21.64	575	364	0.62	26449	44.72
482	104	0.18	5400	9.13	529	216	0.37	13017	22.01	576	363	0.61	26812	45.33
483	92	0.16	5492	9.29	530	241	0.41	13258	22.42	577	332	0.56	27144	45.89
484	99	0.17	5591	9.45	531	237	0.40	13495	22.82	578	359	0.61	27503	46.50
485	127	0.21	5718	9.67	532	232	0.39	13727	23.21	579	346	0.59	27849	47.09
486	103	0.17	5821	9.84	533	244	0.41	13971	23.62	580	334	0.56	28183	47.65
487	104	0.18	5925	10.02	534	259	0.44	14230	24.06	581	379	0.64	28562	48.29
488	118	0.20	6043	10.22	535	248	0.42	14478	24.48	582	352	0.60	28914	48.89
489	95	0.16	6138	10.38	536	266	0.45	14744	24.93	583	303	0.51	29217	49.40
490	129	0.22	6267	10.60	537	265	0.45	15009	25.38	584	309	0.52	29526	49.92
491	115	0.19	6382	10.79	538	265	0.45	15274	25.83	585	347	0.59	29873	50.51
492	134	0.23	6516	11.02	539	264	0.45	15538	26.27	586	383	0.65	30256	51.16
493	144	0.24	6660	11.26	540	246	0.42	15784	26.69	587	354	0.60	30610	51.76
494	113	0.19	6773	11.45	541	262	0.44	16046	27.13	588	356	0.60	30966	52.36
495	144	0.24	6917	11.70	542	254	0.43	16300	27.56	589	357	0.60	31323	52.96
496	141	0.24	7058	11.93	543	283	0.48	16583	28.04	590	318	0.54	31641	53.50
497	144	0.24	7202	12.18	544	269	0.45	16852	28.49	591	319	0.54	31960	54.04
498	141	0.24	7343	12.42	545	258	0.44	17110	28.93	592	359	0.61	32319	54.64
499	136	0.23	7479	12.65	546	267	0.45	17377	29.38	593	318	0.54	32637	55.18
500	157	0.27	7636	12.91	547	304	0.51	17681	29.89	594	376	0.64	33013	55.82
501	146	0.25	7782	13.16	548	310	0.52	17991	30.42	595	339	0.57	33352	56.39
502	150	0.25	7932	13.41	549	264	0.45	18255	30.87	596	356	0.60	33708	56.99
503	151	0.26	8083	13.67	550	271	0.46	18526	31.32	597	380	0.64	34088	57.64
504	161	0.27	8244	13.94	551	278	0.47	18804	31.79	598	361	0.61	34449	58.25
505	187	0.32	8431	14.26	552	315	0.53	19119	32.33	599	374	0.63	34823	58.88
506	170	0.29	8601	14.54	553	311	0.53	19430	32.85	600	352	0.60	35175	59.47
507	164	0.28	8765	14.82	554	303	0.51	19733	33.36	601	339	0.57	35514	60.05
508	169	0.29	8934	15.11	555	297	0.50	20030	33.87	602	336	0.57	35850	60.61
509	155	0.26	9089	15.37	556	311	0.53	20341	34.39	603	359	0.61	36209	61.22
510	151	0.26	9240	15.62	557	298	0.50	20639	34.90	604	349	0.59	36558	61.81
511	181	0.31	9421	15.93	558	286	0.48	20925	35.38	605	375	0.63	36933	62.45
512	167	0.28	9588	16.21	559	323	0.55	21248	35.93	606	358	0.61	37291	63.05
513	182	0.31	9770	16.52	560	323	0.55	21571	36.47	607	371	0.63	37662	63.68
514	186	0.31	9956	16.83	561	303	0.51	21874	36.98	608	366	0.62	38028	64.30
515	183	0.31	10139	17.14	562	319	0.54	22193	37.52	609	386	0.65	38414	64.95
516	180	0.30	10319	17.45	563	301	0.51	22494	38.03	610	349	0.59	38763	65.54
517	189	0.32	10508	17.77	564	342	0.58	22836	38.61	611	333	0.56	39096	66.10
518	164	0.28	10672	18.04	565	335	0.57	23171	39.18	612	351	0.59	39447	66.70
519	194	0.33	10866	18.37	566	325	0.55	23496	39.73	613	338	0.57	39785	67.27
520	186	0.31	11052	18.69	567	295	0.50	23791	40.23	614	352	0.60	40137	67.86
521	218	0.37	11270	19.06	568	339	0.57	24130	40.80	615	329	0.56	40466	68.42
522	232	0.39	11502	19.45	569	318	0.54	24448	41.34	616	304	0.51	40770	68.93
523	213	0.36	11715	19.81	570	318	0.54	24766	41.87	617	328	0.55	41098	69.49
524	227	0.38	11942	20.19	571	346	0.59	25112	42.46	618	322	0.54	41420	70.03
525	219	0.37	12161	20.56	572	324	0.55	25436	43.01	619	333	0.56	41753	70.60
526	214	0.36	12375	20.92	573	324	0.55	25760	43.55	620	333	0.56	42086	71.16
527	195	0.33	12570	21.25	574	325	0.55	26085	44.10	621	345	0.58	42431	71.74

**Table 185. Mathematics Grade 9 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
622	357	0.60	42788	72.35	669	174	0.29	54443	92.05	716	36	0.06	58442	98.81
623	312	0.53	43100	72.87	670	173	0.29	54616	92.34	717	35	0.06	58477	98.87
624	285	0.48	43385	73.35	671	177	0.30	54793	92.64	718	29	0.05	58506	98.92
625	324	0.55	43709	73.90	672	144	0.24	54937	92.89	719	23	0.04	58529	98.96
626	298	0.50	44007	74.41	673	156	0.26	55093	93.15	720	24	0.04	58553	99.00
627	306	0.52	44313	74.92	674	151	0.26	55244	93.41	721	29	0.05	58582	99.05
628	294	0.50	44607	75.42	675	156	0.26	55400	93.67	722	19	0.03	58601	99.08
629	334	0.56	44941	75.99	676	130	0.22	55530	93.89	723	27	0.05	58628	99.13
630	272	0.46	45213	76.45	677	126	0.21	55656	94.10	724	21	0.04	58649	99.16
631	279	0.47	45492	76.92	678	125	0.21	55781	94.31	725	25	0.04	58674	99.21
632	302	0.51	45794	77.43	679	118	0.20	55899	94.51	726	25	0.04	58699	99.25
633	322	0.54	46116	77.97	680	119	0.20	56018	94.71	727	15	0.03	58714	99.27
634	278	0.47	46394	78.44	681	109	0.18	56127	94.90	728	30	0.05	58744	99.32
635	324	0.55	46718	78.99	682	98	0.17	56225	95.06	729	16	0.03	58760	99.35
636	279	0.47	46997	79.46	683	123	0.21	56348	95.27	730	17	0.03	58777	99.38
637	281	0.48	47278	79.94	684	104	0.18	56452	95.45	731	21	0.04	58798	99.41
638	265	0.45	47543	80.39	685	98	0.17	56550	95.61	732	19	0.03	58817	99.45
639	277	0.47	47820	80.85	686	82	0.14	56632	95.75	733	20	0.03	58837	99.48
640	291	0.49	48111	81.35	687	97	0.16	56729	95.92	734	21	0.04	58858	99.52
641	274	0.46	48385	81.81	688	84	0.14	56813	96.06	735	12	0.02	58870	99.54
642	259	0.44	48644	82.25	689	71	0.12	56884	96.18	736	9	0.02	58879	99.55
643	228	0.39	48872	82.63	690	81	0.14	56965	96.32	737	17	0.03	58896	99.58
644	262	0.44	49134	83.08	691	68	0.11	57033	96.43	738	17	0.03	58913	99.61
645	287	0.49	49421	83.56	692	91	0.15	57124	96.58	739	8	0.01	58921	99.62
646	231	0.39	49652	83.95	693	67	0.11	57191	96.70	740	18	0.03	58939	99.65
647	239	0.40	49891	84.36	694	80	0.14	57271	96.83	741	6	0.01	58945	99.66
648	247	0.42	50138	84.77	695	86	0.15	57357	96.98	742	12	0.02	58957	99.68
649	260	0.44	50398	85.21	696	77	0.13	57434	97.11	743	9	0.02	58966	99.70
650	222	0.38	50620	85.59	697	67	0.11	57501	97.22	744	10	0.02	58976	99.72
651	264	0.45	50884	86.03	698	82	0.14	57583	97.36	745	7	0.01	58983	99.73
652	255	0.43	51139	86.47	699	68	0.11	57651	97.48	746	7	0.01	58990	99.74
653	213	0.36	51352	86.83	700	60	0.10	57711	97.58	747	5	0.01	58995	99.75
654	190	0.32	51542	87.15	701	61	0.10	57772	97.68	748	5	0.01	59000	99.76
655	222	0.38	51764	87.52	702	55	0.09	57827	97.77	749	7	0.01	59007	99.77
656	210	0.36	51974	87.88	703	46	0.08	57873	97.85	750	8	0.01	59015	99.78
657	214	0.36	52188	88.24	704	51	0.09	57924	97.94	751	6	0.01	59021	99.79
658	231	0.39	52419	88.63	705	64	0.11	57988	98.05	752	7	0.01	59028	99.80
659	214	0.36	52633	88.99	706	45	0.08	58033	98.12	753	3	0.01	59031	99.81
660	200	0.34	52833	89.33	707	51	0.09	58084	98.21	754	3	0.01	59034	99.81
661	193	0.33	53026	89.66	708	49	0.08	58133	98.29	755	5	0.01	59039	99.82
662	184	0.31	53210	89.97	709	40	0.07	58173	98.36	756	7	0.01	59046	99.83
663	173	0.29	53383	90.26	710	45	0.08	58218	98.43	757	3	0.01	59049	99.84
664	177	0.30	53560	90.56	711	48	0.08	58266	98.52	758	3	0.01	59052	99.84
665	176	0.30	53736	90.86	712	34	0.06	58300	98.57	759	3	0.01	59055	99.85
666	181	0.31	53917	91.16	713	40	0.07	58340	98.64	760	2	0.00	59057	99.85
667	191	0.32	54108	91.49	714	40	0.07	58380	98.71	761	5	0.01	59062	99.86
668	161	0.27	54269	91.76	715	26	0.04	58406	98.75	762	5	0.01	59067	99.87

**Table 185. Mathematics Grade 9 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %
763	4	0.01	59071	99.88
764	3	0.01	59074	99.88
765	5	0.01	59079	99.89
766	4	0.01	59083	99.90
767	3	0.01	59086	99.90
768	5	0.01	59091	99.91
769	5	0.01	59096	99.92
770	2	0.00	59098	99.92
773	2	0.00	59100	99.93
775	1	0.00	59101	99.93
776	1	0.00	59102	99.93
777	1	0.00	59103	99.93
778	1	0.00	59104	99.93
779	2	0.00	59106	99.94
780	1	0.00	59107	99.94
781	2	0.00	59109	99.94
782	2	0.00	59111	99.94
783	1	0.00	59112	99.95
784	2	0.00	59114	99.95
787	1	0.00	59115	99.95
788	2	0.00	59117	99.95
789	1	0.00	59118	99.96
790	1	0.00	59119	99.96
792	2	0.00	59121	99.96
793	1	0.00	59122	99.96
794	1	0.00	59123	99.96
797	1	0.00	59124	99.97
798	1	0.00	59125	99.97
800	1	0.00	59126	99.97
802	1	0.00	59127	99.97
805	2	0.00	59129	99.97
806	1	0.00	59130	99.98
823	2	0.00	59132	99.98
826	1	0.00	59133	99.98
841	3	0.01	59136	99.99
850	1	0.00	59137	99.99
853	1	0.00	59138	99.99
863	2	0.00	59140	99.99
902	1	0.00	59141	99.99
920	3	0.01	59144	100

**Table 186. Reading Grade 10 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
370	255	0.46	255	0.46	451	1	0.00	324	0.59	499	7	0.01	544	0.98
373	1	0.00	256	0.46	452	5	0.01	329	0.60	500	10	0.02	554	1.00
375	1	0.00	257	0.47	453	1	0.00	330	0.60	501	8	0.01	562	1.02
379	1	0.00	258	0.47	454	2	0.00	332	0.60	502	14	0.03	576	1.04
381	1	0.00	259	0.47	455	4	0.01	336	0.61	503	11	0.02	587	1.06
388	1	0.00	260	0.47	456	2	0.00	338	0.61	504	9	0.02	596	1.08
392	1	0.00	261	0.47	457	5	0.01	343	0.62	505	8	0.01	604	1.09
393	1	0.00	262	0.47	458	1	0.00	344	0.62	506	7	0.01	611	1.11
394	1	0.00	263	0.48	459	3	0.01	347	0.63	507	9	0.02	620	1.12
399	2	0.00	265	0.48	460	2	0.00	349	0.63	508	3	0.01	623	1.13
400	2	0.00	267	0.48	461	4	0.01	353	0.64	509	13	0.02	636	1.15
401	1	0.00	268	0.49	462	4	0.01	357	0.65	510	9	0.02	645	1.17
402	1	0.00	269	0.49	463	6	0.01	363	0.66	511	11	0.02	656	1.19
404	1	0.00	270	0.49	464	1	0.00	364	0.66	512	14	0.03	670	1.21
405	1	0.00	271	0.49	466	3	0.01	367	0.66	513	15	0.03	685	1.24
408	1	0.00	272	0.49	467	2	0.00	369	0.67	514	9	0.02	694	1.26
410	1	0.00	273	0.49	468	5	0.01	374	0.68	515	13	0.02	707	1.28
411	1	0.00	274	0.50	469	2	0.00	376	0.68	516	17	0.03	724	1.31
412	1	0.00	275	0.50	470	8	0.01	384	0.70	517	17	0.03	741	1.34
414	1	0.00	276	0.50	471	2	0.00	386	0.70	518	16	0.03	757	1.37
419	1	0.00	277	0.50	472	3	0.01	389	0.70	519	16	0.03	773	1.40
421	1	0.00	278	0.50	473	8	0.01	397	0.72	520	13	0.02	786	1.42
422	1	0.00	279	0.51	474	7	0.01	404	0.73	521	22	0.04	808	1.46
423	1	0.00	280	0.51	475	4	0.01	408	0.74	522	10	0.02	818	1.48
425	2	0.00	282	0.51	476	4	0.01	412	0.75	523	15	0.03	833	1.51
428	1	0.00	283	0.51	477	3	0.01	415	0.75	524	11	0.02	844	1.53
429	4	0.01	287	0.52	478	3	0.01	418	0.76	525	18	0.03	862	1.56
430	2	0.00	289	0.52	479	9	0.02	427	0.77	526	15	0.03	877	1.59
431	1	0.00	290	0.53	480	8	0.01	435	0.79	527	16	0.03	893	1.62
432	2	0.00	292	0.53	481	4	0.01	439	0.79	528	24	0.04	917	1.66
433	1	0.00	293	0.53	482	7	0.01	446	0.81	529	21	0.04	938	1.70
435	1	0.00	294	0.53	483	6	0.01	452	0.82	530	23	0.04	961	1.74
436	2	0.00	296	0.54	484	5	0.01	457	0.83	531	17	0.03	978	1.77
437	3	0.01	299	0.54	485	7	0.01	464	0.84	532	20	0.04	998	1.81
438	2	0.00	301	0.54	486	5	0.01	469	0.85	533	20	0.04	1018	1.84
439	2	0.00	303	0.55	487	10	0.02	479	0.87	534	18	0.03	1036	1.88
440	1	0.00	304	0.55	488	3	0.01	482	0.87	535	21	0.04	1057	1.91
441	1	0.00	305	0.55	489	2	0.00	484	0.88	536	25	0.05	1082	1.96
442	1	0.00	306	0.55	490	4	0.01	488	0.88	537	26	0.05	1108	2.01
443	2	0.00	308	0.56	491	6	0.01	494	0.89	538	22	0.04	1130	2.05
444	1	0.00	309	0.56	492	8	0.01	502	0.91	539	22	0.04	1152	2.09
445	3	0.01	312	0.56	493	4	0.01	506	0.92	540	18	0.03	1170	2.12
446	1	0.00	313	0.57	494	8	0.01	514	0.93	541	22	0.04	1192	2.16
447	3	0.01	316	0.57	495	7	0.01	521	0.94	542	27	0.05	1219	2.21
448	4	0.01	320	0.58	496	5	0.01	526	0.95	543	28	0.05	1247	2.26
449	1	0.00	321	0.58	497	5	0.01	531	0.96	544	36	0.07	1283	2.32
450	2	0.00	323	0.58	498	6	0.01	537	0.97	545	38	0.07	1321	2.39

**Table 186. Reading Grade 10 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
546	26	0.05	1347	2.44	593	74	0.13	3893	7.05	640	228	0.41	10745	19.45
547	32	0.06	1379	2.50	594	85	0.15	3978	7.20	641	220	0.40	10965	19.85
548	25	0.05	1404	2.54	595	85	0.15	4063	7.36	642	227	0.41	11192	20.26
549	32	0.06	1436	2.60	596	103	0.19	4166	7.54	643	241	0.44	11433	20.70
550	20	0.04	1456	2.64	597	74	0.13	4240	7.68	644	248	0.45	11681	21.15
551	34	0.06	1490	2.70	598	95	0.17	4335	7.85	645	254	0.46	11935	21.61
552	35	0.06	1525	2.76	599	101	0.18	4436	8.03	646	267	0.48	12202	22.09
553	29	0.05	1554	2.81	600	100	0.18	4536	8.21	647	230	0.42	12432	22.51
554	26	0.05	1580	2.86	601	120	0.22	4656	8.43	648	282	0.51	12714	23.02
555	37	0.07	1617	2.93	602	99	0.18	4755	8.61	649	288	0.52	13002	23.54
556	35	0.06	1652	2.99	603	115	0.21	4870	8.82	650	291	0.53	13293	24.07
557	43	0.08	1695	3.07	604	101	0.18	4971	9.00	651	299	0.54	13592	24.61
558	33	0.06	1728	3.13	605	104	0.19	5075	9.19	652	313	0.57	13905	25.17
559	45	0.08	1773	3.21	606	102	0.18	5177	9.37	653	290	0.53	14195	25.70
560	40	0.07	1813	3.28	607	107	0.19	5284	9.57	654	320	0.58	14515	26.28
561	47	0.09	1860	3.37	608	120	0.22	5404	9.78	655	301	0.54	14816	26.82
562	37	0.07	1897	3.43	609	112	0.20	5516	9.99	656	327	0.59	15143	27.41
563	48	0.09	1945	3.52	610	108	0.20	5624	10.18	657	354	0.64	15497	28.06
564	52	0.09	1997	3.62	611	107	0.19	5731	10.38	658	338	0.61	15835	28.67
565	64	0.12	2061	3.73	612	125	0.23	5856	10.60	659	311	0.56	16146	29.23
566	55	0.10	2116	3.83	613	122	0.22	5978	10.82	660	353	0.64	16499	29.87
567	43	0.08	2159	3.91	614	113	0.20	6091	11.03	661	400	0.72	16899	30.59
568	47	0.09	2206	3.99	615	130	0.24	6221	11.26	662	401	0.73	17300	31.32
569	62	0.11	2268	4.11	616	113	0.20	6334	11.47	663	358	0.65	17658	31.97
570	54	0.10	2322	4.20	617	107	0.19	6441	11.66	664	352	0.64	18010	32.60
571	56	0.10	2378	4.31	618	153	0.28	6594	11.94	665	380	0.69	18390	33.29
572	45	0.08	2423	4.39	619	154	0.28	6748	12.22	666	379	0.69	18769	33.98
573	59	0.11	2482	4.49	620	159	0.29	6907	12.50	667	403	0.73	19172	34.71
574	45	0.08	2527	4.57	621	175	0.32	7082	12.82	668	401	0.73	19573	35.43
575	51	0.09	2578	4.67	622	150	0.27	7232	13.09	669	382	0.69	19955	36.13
576	64	0.12	2642	4.78	623	139	0.25	7371	13.34	670	414	0.75	20369	36.88
577	60	0.11	2702	4.89	624	167	0.30	7538	13.65	671	399	0.72	20768	37.60
578	72	0.13	2774	5.02	625	174	0.32	7712	13.96	672	417	0.75	21185	38.35
579	56	0.10	2830	5.12	626	186	0.34	7898	14.30	673	412	0.75	21597	39.10
580	67	0.12	2897	5.24	627	159	0.29	8057	14.59	674	468	0.85	22065	39.95
581	77	0.14	2974	5.38	628	186	0.34	8243	14.92	675	411	0.74	22476	40.69
582	80	0.14	3054	5.53	629	179	0.32	8422	15.25	676	425	0.77	22901	41.46
583	62	0.11	3116	5.64	630	195	0.35	8617	15.60	677	440	0.80	23341	42.26
584	65	0.12	3181	5.76	631	167	0.30	8784	15.90	678	429	0.78	23770	43.03
585	70	0.13	3251	5.89	632	207	0.37	8991	16.28	679	450	0.81	24220	43.85
586	88	0.16	3339	6.04	633	202	0.37	9193	16.64	680	447	0.81	24667	44.66
587	85	0.15	3424	6.20	634	253	0.46	9446	17.10	681	433	0.78	25100	45.44
588	74	0.13	3498	6.33	635	204	0.37	9650	17.47	682	470	0.85	25570	46.29
589	76	0.14	3574	6.47	636	224	0.41	9874	17.88	683	474	0.86	26044	47.15
590	77	0.14	3651	6.61	637	213	0.39	10087	18.26	684	427	0.77	26471	47.92
591	88	0.16	3739	6.77	638	217	0.39	10304	18.65	685	432	0.78	26903	48.70
592	80	0.14	3819	6.91	639	213	0.39	10517	19.04	686	468	0.85	27371	49.55

**Table 186. Reading Grade 10 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
687	447	0.81	27818	50.36	734	299	0.54	47076	85.23	781	48	0.09	54297	98.30
688	449	0.81	28267	51.17	735	276	0.50	47352	85.73	782	48	0.09	54345	98.39
689	448	0.81	28715	51.99	736	302	0.55	47654	86.27	783	49	0.09	54394	98.47
690	492	0.89	29207	52.88	737	254	0.46	47908	86.73	784	39	0.07	54433	98.54
691	465	0.84	29672	53.72	738	274	0.50	48182	87.23	785	34	0.06	54467	98.61
692	446	0.81	30118	54.53	739	238	0.43	48420	87.66	786	51	0.09	54518	98.70
693	470	0.85	30588	55.38	740	226	0.41	48646	88.07	787	35	0.06	54553	98.76
694	452	0.82	31040	56.19	741	271	0.49	48917	88.56	788	41	0.07	54594	98.84
695	460	0.83	31500	57.03	742	238	0.43	49155	88.99	789	32	0.06	54626	98.89
696	464	0.84	31964	57.87	743	236	0.43	49391	89.42	790	31	0.06	54657	98.95
697	477	0.86	32441	58.73	744	217	0.39	49608	89.81	791	37	0.07	54694	99.02
698	479	0.87	32920	59.60	745	224	0.41	49832	90.21	792	32	0.06	54726	99.07
699	492	0.89	33412	60.49	746	198	0.36	50030	90.57	793	15	0.03	54741	99.10
700	449	0.81	33861	61.30	747	232	0.42	50262	90.99	794	32	0.06	54773	99.16
701	445	0.81	34306	62.11	748	174	0.32	50436	91.31	795	25	0.05	54798	99.21
702	484	0.88	34790	62.98	749	195	0.35	50631	91.66	796	25	0.05	54823	99.25
703	460	0.83	35250	63.82	750	195	0.35	50826	92.01	797	23	0.04	54846	99.29
704	422	0.76	35672	64.58	751	149	0.27	50975	92.28	798	17	0.03	54863	99.32
705	425	0.77	36097	65.35	752	180	0.33	51155	92.61	799	18	0.03	54881	99.36
706	454	0.82	36551	66.17	753	163	0.30	51318	92.91	800	18	0.03	54899	99.39
707	488	0.88	37039	67.05	754	176	0.32	51494	93.22	801	15	0.03	54914	99.42
708	445	0.81	37484	67.86	755	165	0.30	51659	93.52	802	10	0.02	54924	99.43
709	447	0.81	37931	68.67	756	155	0.28	51814	93.80	803	13	0.02	54937	99.46
710	400	0.72	38331	69.39	757	141	0.26	51955	94.06	804	16	0.03	54953	99.49
711	415	0.75	38746	70.15	758	163	0.30	52118	94.35	805	11	0.02	54964	99.51
712	444	0.80	39190	70.95	759	142	0.26	52260	94.61	806	10	0.02	54974	99.52
713	420	0.76	39610	71.71	760	148	0.27	52408	94.88	807	9	0.02	54983	99.54
714	407	0.74	40017	72.45	761	143	0.26	52551	95.14	808	10	0.02	54993	99.56
715	407	0.74	40424	73.18	762	132	0.24	52683	95.38	809	9	0.02	55002	99.57
716	440	0.80	40864	73.98	763	114	0.21	52797	95.58	810	11	0.02	55013	99.59
717	415	0.75	41279	74.73	764	111	0.20	52908	95.78	811	16	0.03	55029	99.62
718	369	0.67	41648	75.40	765	121	0.22	53029	96.00	812	11	0.02	55040	99.64
719	356	0.64	42004	76.04	766	103	0.19	53132	96.19	813	13	0.02	55053	99.67
720	378	0.68	42382	76.73	767	97	0.18	53229	96.36	814	7	0.01	55060	99.68
721	352	0.64	42734	77.36	768	91	0.16	53320	96.53	815	13	0.02	55073	99.70
722	388	0.70	43122	78.07	769	93	0.17	53413	96.70	816	6	0.01	55079	99.71
723	330	0.60	43452	78.66	770	78	0.14	53491	96.84	817	13	0.02	55092	99.74
724	371	0.67	43823	79.34	771	94	0.17	53585	97.01	818	6	0.01	55098	99.75
725	350	0.63	44173	79.97	772	85	0.15	53670	97.16	819	9	0.02	55107	99.76
726	345	0.62	44518	80.59	773	82	0.15	53752	97.31	820	9	0.02	55116	99.78
727	349	0.63	44867	81.23	774	87	0.16	53839	97.47	821	8	0.01	55124	99.80
728	326	0.59	45193	81.82	775	85	0.15	53924	97.62	822	6	0.01	55130	99.81
729	318	0.58	45511	82.39	776	75	0.14	53999	97.76	823	2	0.00	55132	99.81
730	343	0.62	45854	83.01	777	64	0.12	54063	97.87	824	8	0.01	55140	99.82
731	286	0.52	46140	83.53	778	66	0.12	54129	97.99	825	6	0.01	55146	99.84
732	321	0.58	46461	84.11	779	65	0.12	54194	98.11	826	6	0.01	55152	99.85
733	316	0.57	46777	84.68	780	55	0.10	54249	98.21	827	5	0.01	55157	99.86



**Table 186. Reading Grade 10 Scale Score Distribution (continued)**

<b>SS</b>	<b>Freq</b>	<b>%</b>	<b>Cum. Freq.</b>	<b>Cum. %</b>
828	5	0.01	55162	99.86
829	1	0.00	55163	99.87
830	2	0.00	55165	99.87
831	4	0.01	55169	99.88
832	2	0.00	55171	99.88
833	4	0.01	55175	99.89
834	3	0.01	55178	99.89
835	5	0.01	55183	99.90
836	3	0.01	55186	99.91
837	1	0.00	55187	99.91
838	1	0.00	55188	99.91
839	3	0.01	55191	99.92
840	1	0.00	55192	99.92
841	4	0.01	55196	99.93
843	2	0.00	55198	99.93
844	4	0.01	55202	99.94
845	1	0.00	55203	99.94
846	1	0.00	55204	99.94
847	5	0.01	55209	99.95
848	1	0.00	55210	99.95
849	1	0.00	55211	99.95
851	1	0.00	55212	99.95
854	4	0.01	55216	99.96
855	1	0.00	55217	99.96
856	1	0.00	55218	99.97
857	2	0.00	55220	99.97
858	1	0.00	55221	99.97
860	2	0.00	55223	99.97
861	1	0.00	55224	99.98
862	1	0.00	55225	99.98
863	1	0.00	55226	99.98
866	1	0.00	55227	99.98
867	1	0.00	55228	99.98
871	1	0.00	55229	99.99
872	1	0.00	55230	99.99
874	1	0.00	55231	99.99
876	1	0.00	55232	99.99
879	1	0.00	55233	99.99
880	1	0.00	55234	99.99
887	2	0.00	55236	100
902	1	0.00	55237	100

**Table 187. Writing Grade 10 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
270	97	0.18	97	0.18	332	8	0.01	246	0.45	379	14	0.03	669	1.21
272	2	0.00	99	0.18	333	6	0.01	252	0.46	380	11	0.02	680	1.23
274	2	0.00	101	0.18	334	10	0.02	262	0.47	381	18	0.03	698	1.26
278	1	0.00	102	0.18	335	10	0.02	272	0.49	382	12	0.02	710	1.29
279	3	0.01	105	0.19	336	3	0.01	275	0.50	383	24	0.04	734	1.33
281	2	0.00	107	0.19	337	3	0.01	278	0.50	384	12	0.02	746	1.35
283	2	0.00	109	0.20	338	6	0.01	284	0.51	385	18	0.03	764	1.38
284	1	0.00	110	0.20	339	2	0.00	286	0.52	386	18	0.03	782	1.42
285	5	0.01	115	0.21	340	10	0.02	296	0.54	387	15	0.03	797	1.44
286	4	0.01	119	0.22	341	7	0.01	303	0.55	388	23	0.04	820	1.48
287	3	0.01	122	0.22	342	8	0.01	311	0.56	389	23	0.04	843	1.53
289	2	0.00	124	0.22	343	6	0.01	317	0.57	390	30	0.05	873	1.58
290	7	0.01	131	0.24	344	1	0.00	318	0.58	391	21	0.04	894	1.62
293	1	0.00	132	0.24	345	4	0.01	322	0.58	392	31	0.06	925	1.67
296	1	0.00	133	0.24	346	7	0.01	329	0.60	393	24	0.04	949	1.72
297	1	0.00	134	0.24	347	8	0.01	337	0.61	394	16	0.03	965	1.75
298	2	0.00	136	0.25	348	9	0.02	346	0.63	395	18	0.03	983	1.78
299	5	0.01	141	0.26	349	7	0.01	353	0.64	396	23	0.04	1006	1.82
300	2	0.00	143	0.26	350	2	0.00	355	0.64	397	28	0.05	1034	1.87
301	2	0.00	145	0.26	351	2	0.00	357	0.65	398	25	0.05	1059	1.92
302	3	0.01	148	0.27	352	7	0.01	364	0.66	399	36	0.07	1095	1.98
303	1	0.00	149	0.27	353	9	0.02	373	0.68	400	18	0.03	1113	2.02
304	2	0.00	151	0.27	354	11	0.02	384	0.70	401	36	0.07	1149	2.08
305	1	0.00	152	0.28	355	7	0.01	391	0.71	402	42	0.08	1191	2.16
306	2	0.00	154	0.28	356	9	0.02	400	0.72	403	37	0.07	1228	2.22
307	2	0.00	156	0.28	357	7	0.01	407	0.74	404	47	0.09	1275	2.31
308	3	0.01	159	0.29	358	4	0.01	411	0.74	405	39	0.07	1314	2.38
309	1	0.00	160	0.29	359	12	0.02	423	0.77	406	35	0.06	1349	2.44
310	4	0.01	164	0.30	360	11	0.02	434	0.79	407	51	0.09	1400	2.54
311	6	0.01	170	0.31	361	9	0.02	443	0.80	408	37	0.07	1437	2.60
312	3	0.01	173	0.31	362	14	0.03	457	0.83	409	43	0.08	1480	2.68
314	5	0.01	178	0.32	363	8	0.01	465	0.84	410	33	0.06	1513	2.74
316	6	0.01	184	0.33	364	5	0.01	470	0.85	411	43	0.08	1556	2.82
317	3	0.01	187	0.34	365	20	0.04	490	0.89	412	50	0.09	1606	2.91
318	4	0.01	191	0.35	366	13	0.02	503	0.91	413	46	0.08	1652	2.99
319	4	0.01	195	0.35	367	9	0.02	512	0.93	414	50	0.09	1702	3.08
320	5	0.01	200	0.36	368	8	0.01	520	0.94	415	54	0.10	1756	3.18
321	3	0.01	203	0.37	369	12	0.02	532	0.96	416	55	0.10	1811	3.28
322	6	0.01	209	0.38	370	9	0.02	541	0.98	417	57	0.10	1868	3.38
323	5	0.01	214	0.39	371	8	0.01	549	0.99	418	48	0.09	1916	3.47
324	3	0.01	217	0.39	372	22	0.04	571	1.03	419	62	0.11	1978	3.58
325	4	0.01	221	0.40	373	11	0.02	582	1.05	420	50	0.09	2028	3.67
327	4	0.01	225	0.41	374	17	0.03	599	1.08	421	52	0.09	2080	3.77
328	2	0.00	227	0.41	375	14	0.03	613	1.11	422	70	0.13	2150	3.89
329	2	0.00	229	0.41	376	13	0.02	626	1.13	423	62	0.11	2212	4.01
330	5	0.01	234	0.42	377	15	0.03	641	1.16	424	74	0.13	2286	4.14
331	4	0.01	238	0.43	378	14	0.03	655	1.19	425	63	0.11	2349	4.25

**Table 187. Writing Grade 10 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
426	45	0.08	2394	4.33	473	102	0.18	6676	12.09	520	197	0.36	14097	25.53
427	62	0.11	2456	4.45	474	160	0.29	6836	12.38	521	211	0.38	14308	25.91
428	62	0.11	2518	4.56	475	110	0.20	6946	12.58	522	201	0.36	14509	26.27
429	74	0.13	2592	4.69	476	104	0.19	7050	12.77	523	240	0.43	14749	26.71
430	75	0.14	2667	4.83	477	136	0.25	7186	13.01	524	195	0.35	14944	27.06
431	83	0.15	2750	4.98	478	109	0.20	7295	13.21	525	224	0.41	15168	27.47
432	79	0.14	2829	5.12	479	103	0.19	7398	13.40	526	218	0.39	15386	27.86
433	69	0.12	2898	5.25	480	139	0.25	7537	13.65	527	212	0.38	15598	28.24
434	95	0.17	2993	5.42	481	130	0.24	7667	13.88	528	217	0.39	15815	28.64
435	83	0.15	3076	5.57	482	117	0.21	7784	14.10	529	223	0.40	16038	29.04
436	78	0.14	3154	5.71	483	133	0.24	7917	14.34	530	199	0.36	16237	29.40
437	74	0.13	3228	5.85	484	107	0.19	8024	14.53	531	211	0.38	16448	29.78
438	72	0.13	3300	5.98	485	139	0.25	8163	14.78	532	227	0.41	16675	30.19
439	81	0.15	3381	6.12	486	148	0.27	8311	15.05	533	221	0.40	16896	30.59
440	80	0.14	3461	6.27	487	124	0.22	8435	15.27	534	221	0.40	17117	31.00
441	81	0.15	3542	6.41	488	144	0.26	8579	15.53	535	218	0.39	17335	31.39
442	87	0.16	3629	6.57	489	153	0.28	8732	15.81	536	226	0.41	17561	31.80
443	84	0.15	3713	6.72	490	158	0.29	8890	16.10	537	209	0.38	17770	32.18
444	98	0.18	3811	6.90	491	144	0.26	9034	16.36	538	242	0.44	18012	32.62
445	92	0.17	3903	7.07	492	119	0.22	9153	16.57	539	248	0.45	18260	33.06
446	90	0.16	3993	7.23	493	153	0.28	9306	16.85	540	230	0.42	18490	33.48
447	81	0.15	4074	7.38	494	139	0.25	9445	17.10	541	219	0.40	18709	33.88
448	80	0.14	4154	7.52	495	151	0.27	9596	17.38	542	258	0.47	18967	34.34
449	94	0.17	4248	7.69	496	145	0.26	9741	17.64	543	217	0.39	19184	34.74
450	101	0.18	4349	7.88	497	170	0.31	9911	17.95	544	238	0.43	19422	35.17
451	100	0.18	4449	8.06	498	175	0.32	10086	18.26	545	246	0.45	19668	35.61
452	102	0.18	4551	8.24	499	182	0.33	10268	18.59	546	269	0.49	19937	36.10
453	82	0.15	4633	8.39	500	158	0.29	10426	18.88	547	256	0.46	20193	36.56
454	80	0.14	4713	8.53	501	139	0.25	10565	19.13	548	250	0.45	20443	37.02
455	101	0.18	4814	8.72	502	191	0.35	10756	19.48	549	243	0.44	20686	37.46
456	99	0.18	4913	8.90	503	175	0.32	10931	19.79	550	254	0.46	20940	37.92
457	91	0.16	5004	9.06	504	174	0.32	11105	20.11	551	282	0.51	21222	38.43
458	96	0.17	5100	9.23	505	164	0.30	11269	20.41	552	284	0.51	21506	38.94
459	111	0.20	5211	9.44	506	189	0.34	11458	20.75	553	273	0.49	21779	39.44
460	100	0.18	5311	9.62	507	174	0.32	11632	21.06	554	247	0.45	22026	39.88
461	100	0.18	5411	9.80	508	178	0.32	11810	21.39	555	268	0.49	22294	40.37
462	91	0.16	5502	9.96	509	198	0.36	12008	21.74	556	277	0.50	22571	40.87
463	110	0.20	5612	10.16	510	187	0.34	12195	22.08	557	271	0.49	22842	41.36
464	96	0.17	5708	10.34	511	174	0.32	12369	22.40	558	290	0.53	23132	41.89
465	123	0.22	5831	10.56	512	189	0.34	12558	22.74	559	273	0.49	23405	42.38
466	116	0.21	5947	10.77	513	180	0.33	12738	23.07	560	288	0.52	23693	42.90
467	107	0.19	6054	10.96	514	209	0.38	12947	23.44	561	292	0.53	23985	43.43
468	98	0.18	6152	11.14	515	208	0.38	13155	23.82	562	254	0.46	24239	43.89
469	93	0.17	6245	11.31	516	188	0.34	13343	24.16	563	272	0.49	24511	44.38
470	109	0.20	6354	11.51	517	172	0.31	13515	24.47	564	263	0.48	24774	44.86
471	110	0.20	6464	11.70	518	184	0.33	13699	24.81	565	321	0.58	25095	45.44
472	110	0.20	6574	11.90	519	201	0.36	13900	25.17	566	266	0.48	25361	45.92

**Table 187. Writing Grade 10 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
567	274	0.50	25635	46.42	614	248	0.45	37976	68.77	661	130	0.24	46936	84.99
568	261	0.47	25896	46.89	615	250	0.45	38226	69.22	662	138	0.25	47074	85.24
569	251	0.45	26147	47.35	616	240	0.43	38466	69.65	663	148	0.27	47222	85.51
570	300	0.54	26447	47.89	617	217	0.39	38683	70.05	664	135	0.24	47357	85.75
571	238	0.43	26685	48.32	618	247	0.45	38930	70.49	665	123	0.22	47480	85.98
572	294	0.53	26979	48.85	619	207	0.37	39137	70.87	666	131	0.24	47611	86.21
573	277	0.50	27256	49.35	620	236	0.43	39373	71.30	667	145	0.26	47756	86.48
574	263	0.48	27519	49.83	621	231	0.42	39604	71.71	668	136	0.25	47892	86.72
575	277	0.50	27796	50.33	622	225	0.41	39829	72.12	669	137	0.25	48029	86.97
576	288	0.52	28084	50.85	623	196	0.35	40025	72.48	670	131	0.24	48160	87.21
577	291	0.53	28375	51.38	624	215	0.39	40240	72.87	671	123	0.22	48283	87.43
578	295	0.53	28670	51.91	625	227	0.41	40467	73.28	672	136	0.25	48419	87.68
579	297	0.54	28967	52.45	626	213	0.39	40680	73.66	673	150	0.27	48569	87.95
580	281	0.51	29248	52.96	627	203	0.37	40883	74.03	674	116	0.21	48685	88.16
581	265	0.48	29513	53.44	628	201	0.36	41084	74.39	675	120	0.22	48805	88.37
582	288	0.52	29801	53.96	629	207	0.37	41291	74.77	676	117	0.21	48922	88.59
583	260	0.47	30061	54.43	630	221	0.40	41512	75.17	677	106	0.19	49028	88.78
584	273	0.49	30334	54.93	631	199	0.36	41711	75.53	678	111	0.20	49139	88.98
585	260	0.47	30594	55.40	632	215	0.39	41926	75.92	679	114	0.21	49253	89.19
586	252	0.46	30846	55.86	633	205	0.37	42131	76.29	680	118	0.21	49371	89.40
587	260	0.47	31106	56.33	634	197	0.36	42328	76.65	681	122	0.22	49493	89.62
588	290	0.53	31396	56.85	635	185	0.33	42513	76.98	682	126	0.23	49619	89.85
589	285	0.52	31681	57.37	636	165	0.30	42678	77.28	683	85	0.15	49704	90.00
590	263	0.48	31944	57.84	637	181	0.33	42859	77.61	684	101	0.18	49805	90.19
591	254	0.46	32198	58.30	638	190	0.34	43049	77.95	685	103	0.19	49908	90.37
592	280	0.51	32478	58.81	639	186	0.34	43235	78.29	686	84	0.15	49992	90.52
593	290	0.53	32768	59.34	640	201	0.36	43436	78.65	687	112	0.20	50104	90.73
594	257	0.47	33025	59.80	641	175	0.32	43611	78.97	688	102	0.18	50206	90.91
595	253	0.46	33278	60.26	642	210	0.38	43821	79.35	689	105	0.19	50311	91.10
596	283	0.51	33561	60.77	643	177	0.32	43998	79.67	690	91	0.16	50402	91.27
597	227	0.41	33788	61.18	644	166	0.30	44164	79.97	691	98	0.18	50500	91.44
598	238	0.43	34026	61.61	645	206	0.37	44370	80.34	692	110	0.20	50610	91.64
599	237	0.43	34263	62.04	646	177	0.32	44547	80.66	693	74	0.13	50684	91.78
600	276	0.50	34539	62.54	647	176	0.32	44723	80.98	694	86	0.16	50770	91.93
601	257	0.47	34796	63.01	648	175	0.32	44898	81.30	695	94	0.17	50864	92.10
602	274	0.50	35070	63.50	649	185	0.33	45083	81.64	696	84	0.15	50948	92.26
603	231	0.42	35301	63.92	650	153	0.28	45236	81.91	697	73	0.13	51021	92.39
604	241	0.44	35542	64.36	651	169	0.31	45405	82.22	698	89	0.16	51110	92.55
605	227	0.41	35769	64.77	652	166	0.30	45571	82.52	699	80	0.14	51190	92.69
606	241	0.44	36010	65.21	653	151	0.27	45722	82.79	700	95	0.17	51285	92.87
607	258	0.47	36268	65.67	654	145	0.26	45867	83.05	701	82	0.15	51367	93.01
608	227	0.41	36495	66.08	655	145	0.26	46012	83.32	702	75	0.14	51442	93.15
609	256	0.46	36751	66.55	656	170	0.31	46182	83.63	703	96	0.17	51538	93.32
610	234	0.42	36985	66.97	657	164	0.30	46346	83.92	704	74	0.13	51612	93.46
611	272	0.49	37257	67.46	658	155	0.28	46501	84.20	705	69	0.12	51681	93.58
612	244	0.44	37501	67.91	659	171	0.31	46672	84.51	706	61	0.11	51742	93.69
613	227	0.41	37728	68.32	660	134	0.24	46806	84.76	707	76	0.14	51818	93.83

**Table 187. Writing Grade 10 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
708	44	0.08	51862	93.91	755	19	0.03	53911	97.62	802	8	0.01	54726	99.10
709	71	0.13	51933	94.04	756	28	0.05	53939	97.67	803	8	0.01	54734	99.11
710	59	0.11	51992	94.15	757	28	0.05	53967	97.72	804	5	0.01	54739	99.12
711	65	0.12	52057	94.26	758	17	0.03	53984	97.75	805	13	0.02	54752	99.14
712	77	0.14	52134	94.40	759	29	0.05	54013	97.81	806	3	0.01	54755	99.15
713	70	0.13	52204	94.53	760	18	0.03	54031	97.84	807	6	0.01	54761	99.16
714	51	0.09	52255	94.62	761	23	0.04	54054	97.88	808	2	0.00	54763	99.16
715	72	0.13	52327	94.75	762	26	0.05	54080	97.93	809	6	0.01	54769	99.17
716	44	0.08	52371	94.83	763	22	0.04	54102	97.97	810	13	0.02	54782	99.20
717	58	0.11	52429	94.94	764	22	0.04	54124	98.01	811	2	0.00	54784	99.20
718	47	0.09	52476	95.02	765	37	0.07	54161	98.07	812	3	0.01	54787	99.21
719	80	0.14	52556	95.17	766	17	0.03	54178	98.10	813	21	0.04	54808	99.24
720	57	0.10	52613	95.27	767	28	0.05	54206	98.15	814	1	0.00	54809	99.25
721	51	0.09	52664	95.36	768	25	0.05	54231	98.20	815	4	0.01	54813	99.25
722	61	0.11	52725	95.47	769	28	0.05	54259	98.25	816	16	0.03	54829	99.28
723	51	0.09	52776	95.57	770	19	0.03	54278	98.29	817	1	0.00	54830	99.28
724	34	0.06	52810	95.63	771	19	0.03	54297	98.32	818	2	0.00	54832	99.29
725	46	0.08	52856	95.71	772	13	0.02	54310	98.34	819	12	0.02	54844	99.31
726	46	0.08	52902	95.79	773	12	0.02	54322	98.36	820	7	0.01	54851	99.32
727	66	0.12	52968	95.91	774	25	0.05	54347	98.41	821	4	0.01	54855	99.33
728	55	0.10	53023	96.01	775	12	0.02	54359	98.43	822	6	0.01	54861	99.34
729	41	0.07	53064	96.09	776	20	0.04	54379	98.47	823	18	0.03	54879	99.37
730	34	0.06	53098	96.15	777	9	0.02	54388	98.48	824	4	0.01	54883	99.38
731	39	0.07	53137	96.22	778	23	0.04	54411	98.53	825	20	0.04	54903	99.42
732	46	0.08	53183	96.30	779	10	0.02	54421	98.54	826	3	0.01	54906	99.42
733	38	0.07	53221	96.37	780	22	0.04	54443	98.58	827	5	0.01	54911	99.43
734	42	0.08	53263	96.45	781	3	0.01	54446	98.59	828	13	0.02	54924	99.45
735	34	0.06	53297	96.51	782	30	0.05	54476	98.64	829	7	0.01	54931	99.47
736	37	0.07	53334	96.58	783	6	0.01	54482	98.65	830	5	0.01	54936	99.48
737	45	0.08	53379	96.66	784	18	0.03	54500	98.69	831	2	0.00	54938	99.48
738	35	0.06	53414	96.72	785	11	0.02	54511	98.71	833	10	0.02	54948	99.50
739	28	0.05	53442	96.77	786	37	0.07	54548	98.77	835	6	0.01	54954	99.51
740	24	0.04	53466	96.81	787	4	0.01	54552	98.78	836	14	0.03	54968	99.53
741	65	0.12	53531	96.93	788	5	0.01	54557	98.79	837	13	0.02	54981	99.56
742	28	0.05	53559	96.98	789	13	0.02	54570	98.81	839	5	0.01	54986	99.57
743	31	0.06	53590	97.04	790	13	0.02	54583	98.84	840	12	0.02	54998	99.59
744	43	0.08	53633	97.12	791	8	0.01	54591	98.85	841	5	0.01	55003	99.60
745	29	0.05	53662	97.17	792	22	0.04	54613	98.89	842	2	0.00	55005	99.60
746	23	0.04	53685	97.21	793	6	0.01	54619	98.90	843	8	0.01	55013	99.62
747	28	0.05	53713	97.26	794	25	0.05	54644	98.95	844	1	0.00	55014	99.62
748	30	0.05	53743	97.32	795	3	0.01	54647	98.95	845	1	0.00	55015	99.62
749	21	0.04	53764	97.35	796	19	0.03	54666	98.99	846	2	0.00	55017	99.62
750	20	0.04	53784	97.39	797	8	0.01	54674	99.00	847	3	0.01	55020	99.63
751	23	0.04	53807	97.43	798	4	0.01	54678	99.01	848	3	0.01	55023	99.63
752	20	0.04	53827	97.47	799	17	0.03	54695	99.04	849	4	0.01	55027	99.64
753	31	0.06	53858	97.52	800	5	0.01	54700	99.05	851	1	0.00	55028	99.64
754	34	0.06	53892	97.59	801	18	0.03	54718	99.08	852	12	0.02	55040	99.67

**Table 187. Writing Grade 10 Scale Score Distribution (continued)**

<b>SS</b>	<b>Freq</b>	<b>%</b>	<b>Cum. Freq.</b>	<b>Cum. %</b>
853	7	0.01	55047	99.68
855	1	0.00	55048	99.68
856	2	0.00	55050	99.68
857	13	0.02	55063	99.71
859	2	0.00	55065	99.71
861	5	0.01	55070	99.72
862	1	0.00	55071	99.72
864	3	0.01	55074	99.73
865	6	0.01	55080	99.74
866	2	0.00	55082	99.74
870	1	0.00	55083	99.74
871	4	0.01	55087	99.75
875	4	0.01	55091	99.76
876	1	0.00	55092	99.76
881	8	0.01	55100	99.77
887	1	0.00	55101	99.78
889	5	0.01	55106	99.78
890	15	0.03	55121	99.81
896	12	0.02	55133	99.83
898	2	0.00	55135	99.84
899	13	0.02	55148	99.86
900	3	0.01	55151	99.87
902	2	0.00	55153	99.87
903	3	0.01	55156	99.88
910	3	0.01	55159	99.88
917	13	0.02	55172	99.90
926	12	0.02	55184	99.93
950	41	0.07	55225	100

**Table 188. Mathematics Grade 10 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
370	840	1.52	840	1.52	418	29	0.05	1623	2.93	465	85	0.15	3449	6.22
372	9	0.02	849	1.53	419	17	0.03	1640	2.96	466	67	0.12	3516	6.34
373	13	0.02	862	1.56	420	14	0.03	1654	2.98	467	52	0.09	3568	6.44
374	8	0.01	870	1.57	421	29	0.05	1683	3.04	468	72	0.13	3640	6.57
375	5	0.01	875	1.58	422	26	0.05	1709	3.08	469	67	0.12	3707	6.69
376	11	0.02	886	1.60	423	22	0.04	1731	3.12	470	56	0.10	3763	6.79
377	7	0.01	893	1.61	424	34	0.06	1765	3.18	471	75	0.14	3838	6.93
378	11	0.02	904	1.63	425	24	0.04	1789	3.23	472	72	0.13	3910	7.06
379	6	0.01	910	1.64	426	24	0.04	1813	3.27	473	57	0.10	3967	7.16
380	8	0.01	918	1.66	427	34	0.06	1847	3.33	474	70	0.13	4037	7.28
381	16	0.03	934	1.69	428	31	0.06	1878	3.39	475	81	0.15	4118	7.43
382	17	0.03	951	1.72	429	36	0.06	1914	3.45	476	65	0.12	4183	7.55
383	13	0.02	964	1.74	430	28	0.05	1942	3.50	477	73	0.13	4256	7.68
384	11	0.02	975	1.76	431	25	0.05	1967	3.55	478	67	0.12	4323	7.80
385	13	0.02	988	1.78	432	28	0.05	1995	3.60	479	79	0.14	4402	7.94
386	13	0.02	1001	1.81	433	32	0.06	2027	3.66	480	76	0.14	4478	8.08
387	18	0.03	1019	1.84	434	39	0.07	2066	3.73	481	94	0.17	4572	8.25
388	10	0.02	1029	1.86	435	18	0.03	2084	3.76	482	73	0.13	4645	8.38
389	18	0.03	1047	1.89	436	30	0.05	2114	3.81	483	74	0.13	4719	8.52
390	11	0.02	1058	1.91	437	38	0.07	2152	3.88	484	92	0.17	4811	8.68
391	15	0.03	1073	1.94	438	32	0.06	2184	3.94	485	75	0.14	4886	8.82
392	14	0.03	1087	1.96	439	33	0.06	2217	4.00	486	82	0.15	4968	8.96
393	12	0.02	1099	1.98	440	33	0.06	2250	4.06	487	83	0.15	5051	9.11
394	18	0.03	1117	2.02	441	31	0.06	2281	4.12	488	80	0.14	5131	9.26
395	19	0.03	1136	2.05	442	46	0.08	2327	4.20	489	84	0.15	5215	9.41
396	23	0.04	1159	2.09	443	38	0.07	2365	4.27	490	93	0.17	5308	9.58
397	23	0.04	1182	2.13	444	48	0.09	2413	4.35	491	84	0.15	5392	9.73
398	25	0.05	1207	2.18	445	57	0.10	2470	4.46	492	90	0.16	5482	9.89
399	13	0.02	1220	2.20	446	47	0.08	2517	4.54	493	118	0.21	5600	10.10
400	27	0.05	1247	2.25	447	39	0.07	2556	4.61	494	83	0.15	5683	10.25
401	23	0.04	1270	2.29	448	36	0.06	2592	4.68	495	100	0.18	5783	10.44
402	17	0.03	1287	2.32	449	44	0.08	2636	4.76	496	90	0.16	5873	10.60
403	18	0.03	1305	2.35	450	56	0.10	2692	4.86	497	99	0.18	5972	10.78
404	21	0.04	1326	2.39	451	42	0.08	2734	4.93	498	98	0.18	6070	10.95
405	13	0.02	1339	2.42	452	39	0.07	2773	5.00	499	103	0.19	6173	11.14
406	22	0.04	1361	2.46	453	43	0.08	2816	5.08	500	97	0.18	6270	11.31
407	17	0.03	1378	2.49	454	53	0.10	2869	5.18	501	91	0.16	6361	11.48
408	14	0.03	1392	2.51	455	48	0.09	2917	5.26	502	128	0.23	6489	11.71
409	20	0.04	1412	2.55	456	55	0.10	2972	5.36	503	110	0.20	6599	11.91
410	20	0.04	1432	2.58	457	48	0.09	3020	5.45	504	124	0.22	6723	12.13
411	23	0.04	1455	2.63	458	40	0.07	3060	5.52	505	125	0.23	6848	12.36
412	23	0.04	1478	2.67	459	48	0.09	3108	5.61	506	160	0.29	7008	12.65
413	18	0.03	1496	2.70	460	38	0.07	3146	5.68	507	119	0.21	7127	12.86
414	21	0.04	1517	2.74	461	47	0.08	3193	5.76	508	123	0.22	7250	13.08
415	22	0.04	1539	2.78	462	69	0.12	3262	5.89	509	136	0.25	7386	13.33
416	30	0.05	1569	2.83	463	44	0.08	3306	5.97	510	112	0.20	7498	13.53
417	25	0.05	1594	2.88	464	58	0.10	3364	6.07	511	118	0.21	7616	13.74

**Table 188. Mathematics Grade 10 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
512	141	0.25	7757	14.00	559	272	0.49	17130	30.91	606	314	0.57	31706	57.21
513	133	0.24	7890	14.24	560	291	0.53	17421	31.44	607	340	0.61	32046	57.82
514	140	0.25	8030	14.49	561	267	0.48	17688	31.92	608	340	0.61	32386	58.44
515	138	0.25	8168	14.74	562	292	0.53	17980	32.44	609	321	0.58	32707	59.02
516	133	0.24	8301	14.98	563	280	0.51	18260	32.95	610	344	0.62	33051	59.64
517	150	0.27	8451	15.25	564	292	0.53	18552	33.48	611	326	0.59	33377	60.23
518	154	0.28	8605	15.53	565	286	0.52	18838	33.99	612	305	0.55	33682	60.78
519	154	0.28	8759	15.81	566	266	0.48	19104	34.47	613	326	0.59	34008	61.37
520	160	0.29	8919	16.09	567	296	0.53	19400	35.01	614	323	0.58	34331	61.95
521	179	0.32	9098	16.42	568	280	0.51	19680	35.51	615	328	0.59	34659	62.54
522	157	0.28	9255	16.70	569	258	0.47	19938	35.98	616	327	0.59	34986	63.13
523	158	0.29	9413	16.99	570	298	0.54	20236	36.51	617	310	0.56	35296	63.69
524	163	0.29	9576	17.28	571	278	0.50	20514	37.02	618	337	0.61	35633	64.30
525	183	0.33	9759	17.61	572	276	0.50	20790	37.51	619	340	0.61	35973	64.91
526	173	0.31	9932	17.92	573	298	0.54	21088	38.05	620	306	0.55	36279	65.46
527	172	0.31	10104	18.23	574	303	0.55	21391	38.60	621	312	0.56	36591	66.03
528	157	0.28	10261	18.52	575	309	0.56	21700	39.16	622	329	0.59	36920	66.62
529	157	0.28	10418	18.80	576	329	0.59	22029	39.75	623	309	0.56	37229	67.18
530	193	0.35	10611	19.15	577	316	0.57	22345	40.32	624	302	0.54	37531	67.72
531	193	0.35	10804	19.50	578	297	0.54	22642	40.86	625	303	0.55	37834	68.27
532	180	0.32	10984	19.82	579	321	0.58	22963	41.44	626	294	0.53	38128	68.80
533	180	0.32	11164	20.14	580	305	0.55	23268	41.99	627	301	0.54	38429	69.34
534	171	0.31	11335	20.45	581	322	0.58	23590	42.57	628	309	0.56	38738	69.90
535	190	0.34	11525	20.80	582	320	0.58	23910	43.14	629	321	0.58	39059	70.48
536	199	0.36	11724	21.16	583	329	0.59	24239	43.74	630	279	0.50	39338	70.98
537	200	0.36	11924	21.52	584	287	0.52	24526	44.26	631	301	0.54	39639	71.53
538	221	0.40	12145	21.91	585	318	0.57	24844	44.83	632	309	0.56	39948	72.08
539	215	0.39	12360	22.30	586	351	0.63	25195	45.46	633	276	0.50	40224	72.58
540	207	0.37	12567	22.68	587	325	0.59	25520	46.05	634	300	0.54	40524	73.12
541	203	0.37	12770	23.04	588	320	0.58	25840	46.63	635	276	0.50	40800	73.62
542	226	0.41	12996	23.45	589	361	0.65	26201	47.28	636	256	0.46	41056	74.08
543	226	0.41	13222	23.86	590	307	0.55	26508	47.83	637	289	0.52	41345	74.60
544	226	0.41	13448	24.27	591	346	0.62	26854	48.46	638	302	0.54	41647	75.15
545	230	0.42	13678	24.68	592	351	0.63	27205	49.09	639	256	0.46	41903	75.61
546	229	0.41	13907	25.09	593	304	0.55	27509	49.64	640	277	0.50	42180	76.11
547	233	0.42	14140	25.51	594	324	0.58	27833	50.22	641	286	0.52	42466	76.63
548	231	0.42	14371	25.93	595	315	0.57	28148	50.79	642	286	0.52	42752	77.14
549	252	0.45	14623	26.39	596	352	0.64	28500	51.43	643	237	0.43	42989	77.57
550	227	0.41	14850	26.80	597	316	0.57	28816	52.00	644	272	0.49	43261	78.06
551	232	0.42	15082	27.21	598	342	0.62	29158	52.61	645	246	0.44	43507	78.51
552	247	0.45	15329	27.66	599	335	0.60	29493	53.22	646	262	0.47	43769	78.98
553	246	0.44	15575	28.10	600	307	0.55	29800	53.77	647	258	0.47	44027	79.44
554	265	0.48	15840	28.58	601	343	0.62	30143	54.39	648	270	0.49	44297	79.93
555	251	0.45	16091	29.04	602	326	0.59	30469	54.98	649	257	0.46	44554	80.39
556	277	0.50	16368	29.53	603	303	0.55	30772	55.53	650	257	0.46	44811	80.86
557	237	0.43	16605	29.96	604	311	0.56	31083	56.09	651	259	0.47	45070	81.33
558	253	0.46	16858	30.42	605	309	0.56	31392	56.64	652	236	0.43	45306	81.75



**Table 188. Mathematics Grade 10 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
653	237	0.43	45543	82.18	700	101	0.18	53244	96.08	747	17	0.03	55149	99.51
654	247	0.45	45790	82.63	701	87	0.16	53331	96.23	748	11	0.02	55160	99.53
655	236	0.43	46026	83.05	702	89	0.16	53420	96.39	749	11	0.02	55171	99.55
656	216	0.39	46242	83.44	703	71	0.13	53491	96.52	750	14	0.03	55185	99.58
657	247	0.45	46489	83.89	704	75	0.14	53566	96.66	751	8	0.01	55193	99.59
658	212	0.38	46701	84.27	705	75	0.14	53641	96.79	752	7	0.01	55200	99.60
659	206	0.37	46907	84.64	706	67	0.12	53708	96.91	753	10	0.02	55210	99.62
660	231	0.42	47138	85.06	707	62	0.11	53770	97.02	754	9	0.02	55219	99.64
661	213	0.38	47351	85.44	708	83	0.15	53853	97.17	755	11	0.02	55230	99.66
662	250	0.45	47601	85.89	709	62	0.11	53915	97.29	756	11	0.02	55241	99.68
663	205	0.37	47806	86.26	710	56	0.10	53971	97.39	757	9	0.02	55250	99.70
664	176	0.32	47982	86.58	711	64	0.12	54035	97.50	758	6	0.01	55256	99.71
665	190	0.34	48172	86.92	712	61	0.11	54096	97.61	759	12	0.02	55268	99.73
666	212	0.38	48384	87.31	713	54	0.10	54150	97.71	760	9	0.02	55277	99.74
667	201	0.36	48585	87.67	714	42	0.08	54192	97.79	761	5	0.01	55282	99.75
668	206	0.37	48791	88.04	715	62	0.11	54254	97.90	762	7	0.01	55289	99.77
669	192	0.35	48983	88.39	716	58	0.10	54312	98.00	763	7	0.01	55296	99.78
670	195	0.35	49178	88.74	717	53	0.10	54365	98.10	764	10	0.02	55306	99.80
671	185	0.33	49363	89.07	718	42	0.08	54407	98.17	765	6	0.01	55312	99.81
672	166	0.30	49529	89.37	719	51	0.09	54458	98.27	766	8	0.01	55320	99.82
673	168	0.30	49697	89.68	720	51	0.09	54509	98.36	767	4	0.01	55324	99.83
674	194	0.35	49891	90.03	721	38	0.07	54547	98.43	768	9	0.02	55333	99.84
675	176	0.32	50067	90.34	722	41	0.07	54588	98.50	769	3	0.01	55336	99.85
676	154	0.28	50221	90.62	723	33	0.06	54621	98.56	770	2	0.00	55338	99.85
677	144	0.26	50365	90.88	724	33	0.06	54654	98.62	771	6	0.01	55344	99.86
678	163	0.29	50528	91.17	725	41	0.07	54695	98.69	772	4	0.01	55348	99.87
679	162	0.29	50690	91.47	726	31	0.06	54726	98.75	773	2	0.00	55350	99.88
680	149	0.27	50839	91.74	727	27	0.05	54753	98.80	774	4	0.01	55354	99.88
681	167	0.30	51006	92.04	728	30	0.05	54783	98.85	775	2	0.00	55356	99.89
682	151	0.27	51157	92.31	729	25	0.05	54808	98.90	776	3	0.01	55359	99.89
683	137	0.25	51294	92.56	730	30	0.05	54838	98.95	777	4	0.01	55363	99.90
684	141	0.25	51435	92.81	731	22	0.04	54860	98.99	778	1	0.00	55364	99.90
685	130	0.23	51565	93.05	732	17	0.03	54877	99.02	779	4	0.01	55368	99.91
686	154	0.28	51719	93.32	733	26	0.05	54903	99.07	780	3	0.01	55371	99.91
687	142	0.26	51861	93.58	734	20	0.04	54923	99.11	781	7	0.01	55378	99.93
688	128	0.23	51989	93.81	735	24	0.04	54947	99.15	782	1	0.00	55379	99.93
689	139	0.25	52128	94.06	736	16	0.03	54963	99.18	783	5	0.01	55384	99.94
690	106	0.19	52234	94.25	737	25	0.05	54988	99.22	784	1	0.00	55385	99.94
691	120	0.22	52354	94.47	738	14	0.03	55002	99.25	785	2	0.00	55387	99.94
692	121	0.22	52475	94.69	739	17	0.03	55019	99.28	786	1	0.00	55388	99.94
693	125	0.23	52600	94.91	740	14	0.03	55033	99.30	787	1	0.00	55389	99.95
694	97	0.18	52697	95.09	741	21	0.04	55054	99.34	788	1	0.00	55390	99.95
695	105	0.19	52802	95.28	742	15	0.03	55069	99.37	789	1	0.00	55391	99.95
696	92	0.17	52894	95.44	743	18	0.03	55087	99.40	790	3	0.01	55394	99.95
697	81	0.15	52975	95.59	744	20	0.04	55107	99.44	791	1	0.00	55395	99.96
698	85	0.15	53060	95.74	745	13	0.02	55120	99.46	792	2	0.00	55397	99.96
699	83	0.15	53143	95.89	746	12	0.02	55132	99.48	793	1	0.00	55398	99.96

**Table 188. Mathematics Grade 10 Scale Score Distribution (continued)**

<b>SS</b>	<b>Freq</b>	<b>%</b>	<b>Cum. Freq.</b>	<b>Cum. %</b>
795	1	0.00	55399	99.96
797	1	0.00	55400	99.97
800	3	0.01	55403	99.97
801	2	0.00	55405	99.97
803	2	0.00	55407	99.98
807	2	0.00	55409	99.98
810	1	0.00	55410	99.98
815	1	0.00	55411	99.99
817	1	0.00	55412	99.99
820	1	0.00	55413	99.99
840	2	0.00	55415	99.99
845	1	0.00	55416	99.99
847	1	0.00	55417	100
904	2	0.00	55419	100

**Table 189. Science Grade 10 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
300	907	1.63	907	1.63	347	46	0.08	1790	3.22	394	72	0.13	4248	7.65
301	17	0.03	924	1.66	348	33	0.06	1823	3.28	395	93	0.17	4341	7.81
302	9	0.02	933	1.68	349	30	0.05	1853	3.34	396	82	0.15	4423	7.96
303	9	0.02	942	1.70	350	23	0.04	1876	3.38	397	78	0.14	4501	8.10
304	6	0.01	948	1.71	351	36	0.06	1912	3.44	398	89	0.16	4590	8.26
305	17	0.03	965	1.74	352	23	0.04	1935	3.48	399	89	0.16	4679	8.42
306	19	0.03	984	1.77	353	27	0.05	1962	3.53	400	88	0.16	4767	8.58
307	10	0.02	994	1.79	354	34	0.06	1996	3.59	401	102	0.18	4869	8.76
308	11	0.02	1005	1.81	355	26	0.05	2022	3.64	402	96	0.17	4965	8.94
309	14	0.03	1019	1.83	356	34	0.06	2056	3.70	403	81	0.15	5046	9.08
310	12	0.02	1031	1.86	357	40	0.07	2096	3.77	404	91	0.16	5137	9.25
311	16	0.03	1047	1.88	358	30	0.05	2126	3.83	405	104	0.19	5241	9.43
312	11	0.02	1058	1.90	359	44	0.08	2170	3.91	406	111	0.20	5352	9.63
313	13	0.02	1071	1.93	360	48	0.09	2218	3.99	407	90	0.16	5442	9.79
314	15	0.03	1086	1.95	361	41	0.07	2259	4.07	408	88	0.16	5530	9.95
315	12	0.02	1098	1.98	362	45	0.08	2304	4.15	409	94	0.17	5624	10.12
316	17	0.03	1115	2.01	363	41	0.07	2345	4.22	410	120	0.22	5744	10.34
317	15	0.03	1130	2.03	364	36	0.06	2381	4.29	411	117	0.21	5861	10.55
318	6	0.01	1136	2.04	365	45	0.08	2426	4.37	412	118	0.21	5979	10.76
319	7	0.01	1143	2.06	366	47	0.08	2473	4.45	413	132	0.24	6111	11.00
320	20	0.04	1163	2.09	367	51	0.09	2524	4.54	414	107	0.19	6218	11.19
321	17	0.03	1180	2.12	368	50	0.09	2574	4.63	415	113	0.20	6331	11.40
322	21	0.04	1201	2.16	369	49	0.09	2623	4.72	416	116	0.21	6447	11.60
323	15	0.03	1216	2.19	370	69	0.12	2692	4.85	417	97	0.17	6544	11.78
324	21	0.04	1237	2.23	371	50	0.09	2742	4.94	418	137	0.25	6681	12.03
325	11	0.02	1248	2.25	372	44	0.08	2786	5.01	419	134	0.24	6815	12.27
326	20	0.04	1268	2.28	373	47	0.08	2833	5.10	420	125	0.22	6940	12.49
327	15	0.03	1283	2.31	374	49	0.09	2882	5.19	421	134	0.24	7074	12.73
328	24	0.04	1307	2.35	375	42	0.08	2924	5.26	422	120	0.22	7194	12.95
329	21	0.04	1328	2.39	376	43	0.08	2967	5.34	423	143	0.26	7337	13.21
330	16	0.03	1344	2.42	377	53	0.10	3020	5.44	424	135	0.24	7472	13.45
331	21	0.04	1365	2.46	378	78	0.14	3098	5.58	425	135	0.24	7607	13.69
332	22	0.04	1387	2.50	379	62	0.11	3160	5.69	426	153	0.28	7760	13.97
333	14	0.03	1401	2.52	380	62	0.11	3222	5.80	427	136	0.24	7896	14.21
334	31	0.06	1432	2.58	381	67	0.12	3289	5.92	428	146	0.26	8042	14.47
335	21	0.04	1453	2.62	382	68	0.12	3357	6.04	429	128	0.23	8170	14.71
336	16	0.03	1469	2.64	383	77	0.14	3434	6.18	430	167	0.30	8337	15.01
337	25	0.04	1494	2.69	384	55	0.10	3489	6.28	431	148	0.27	8485	15.27
338	25	0.04	1519	2.73	385	83	0.15	3572	6.43	432	171	0.31	8656	15.58
339	21	0.04	1540	2.77	386	69	0.12	3641	6.55	433	167	0.30	8823	15.88
340	30	0.05	1570	2.83	387	83	0.15	3724	6.70	434	177	0.32	9000	16.20
341	26	0.05	1596	2.87	388	75	0.13	3799	6.84	435	170	0.31	9170	16.50
342	33	0.06	1629	2.93	389	64	0.12	3863	6.95	436	161	0.29	9331	16.79
343	31	0.06	1660	2.99	390	73	0.13	3936	7.08	437	167	0.30	9498	17.10
344	27	0.05	1687	3.04	391	80	0.14	4016	7.23	438	152	0.27	9650	17.37
345	32	0.06	1719	3.09	392	74	0.13	4090	7.36	439	178	0.32	9828	17.69
346	25	0.04	1744	3.14	393	86	0.15	4176	7.52	440	169	0.30	9997	17.99

**Table 189. Science Grade 10 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
441	181	0.33	10178	18.32	488	348	0.63	22121	39.82	535	369	0.66	40105	72.18
442	182	0.33	10360	18.65	489	344	0.62	22465	40.43	536	393	0.71	40498	72.89
443	172	0.31	10532	18.96	490	345	0.62	22810	41.06	537	387	0.70	40885	73.59
444	199	0.36	10731	19.31	491	381	0.69	23191	41.74	538	407	0.73	41292	74.32
445	205	0.37	10936	19.68	492	365	0.66	23556	42.40	539	372	0.67	41664	74.99
446	181	0.33	11117	20.01	493	363	0.65	23919	43.05	540	352	0.63	42016	75.62
447	151	0.27	11268	20.28	494	363	0.65	24282	43.70	541	341	0.61	42357	76.24
448	191	0.34	11459	20.62	495	379	0.68	24661	44.39	542	389	0.70	42746	76.94
449	215	0.39	11674	21.01	496	353	0.64	25014	45.02	543	347	0.62	43093	77.56
450	223	0.40	11897	21.41	497	364	0.66	25378	45.68	544	353	0.64	43446	78.20
451	202	0.36	12099	21.78	498	367	0.66	25745	46.34	545	331	0.60	43777	78.79
452	194	0.35	12293	22.13	499	369	0.66	26114	47.00	546	319	0.57	44096	79.37
453	212	0.38	12505	22.51	500	373	0.67	26487	47.67	547	327	0.59	44423	79.96
454	222	0.40	12727	22.91	501	351	0.63	26838	48.31	548	361	0.65	44784	80.61
455	211	0.38	12938	23.29	502	357	0.64	27195	48.95	549	315	0.57	45099	81.17
456	239	0.43	13177	23.72	503	360	0.65	27555	49.60	550	295	0.53	45394	81.70
457	248	0.45	13425	24.16	504	387	0.70	27942	50.29	551	309	0.56	45703	82.26
458	214	0.39	13639	24.55	505	378	0.68	28320	50.97	552	305	0.55	46008	82.81
459	233	0.42	13872	24.97	506	400	0.72	28720	51.69	553	298	0.54	46306	83.35
460	244	0.44	14116	25.41	507	383	0.69	29103	52.38	554	319	0.57	46625	83.92
461	229	0.41	14345	25.82	508	402	0.72	29505	53.11	555	299	0.54	46924	84.46
462	238	0.43	14583	26.25	509	381	0.69	29886	53.79	556	285	0.51	47209	84.97
463	224	0.40	14807	26.65	510	386	0.69	30272	54.49	557	271	0.49	47480	85.46
464	244	0.44	15051	27.09	511	364	0.66	30636	55.14	558	274	0.49	47754	85.95
465	285	0.51	15336	27.60	512	382	0.69	31018	55.83	559	242	0.44	47996	86.39
466	261	0.47	15597	28.07	513	412	0.74	31430	56.57	560	282	0.51	48278	86.90
467	254	0.46	15851	28.53	514	420	0.76	31850	57.33	561	232	0.42	48510	87.31
468	258	0.46	16109	28.99	515	393	0.71	32243	58.03	562	258	0.46	48768	87.78
469	272	0.49	16381	29.48	516	429	0.77	32672	58.81	563	263	0.47	49031	88.25
470	261	0.47	16642	29.95	517	386	0.69	33058	59.50	564	240	0.43	49271	88.68
471	294	0.53	16936	30.48	518	445	0.80	33503	60.30	565	236	0.42	49507	89.11
472	255	0.46	17191	30.94	519	394	0.71	33897	61.01	566	239	0.43	49746	89.54
473	286	0.51	17477	31.46	520	377	0.68	34274	61.69	567	204	0.37	49950	89.90
474	270	0.49	17747	31.94	521	372	0.67	34646	62.36	568	243	0.44	50193	90.34
475	316	0.57	18063	32.51	522	405	0.73	35051	63.09	569	216	0.39	50409	90.73
476	310	0.56	18373	33.07	523	402	0.72	35453	63.81	570	196	0.35	50605	91.08
477	284	0.51	18657	33.58	524	372	0.67	35825	64.48	571	189	0.34	50794	91.42
478	324	0.58	18981	34.16	525	374	0.67	36199	65.15	572	188	0.34	50982	91.76
479	282	0.51	19263	34.67	526	396	0.71	36595	65.87	573	203	0.37	51185	92.13
480	326	0.59	19589	35.26	527	366	0.66	36961	66.53	574	178	0.32	51363	92.45
481	309	0.56	19898	35.81	528	405	0.73	37366	67.25	575	164	0.30	51527	92.74
482	294	0.53	20192	36.34	529	391	0.70	37757	67.96	576	159	0.29	51686	93.03
483	314	0.57	20506	36.91	530	414	0.75	38171	68.70	577	174	0.31	51860	93.34
484	307	0.55	20813	37.46	531	405	0.73	38576	69.43	578	153	0.28	52013	93.62
485	298	0.54	21111	38.00	532	368	0.66	38944	70.09	579	177	0.32	52190	93.94
486	322	0.58	21433	38.58	533	423	0.76	39367	70.86	580	148	0.27	52338	94.20
487	340	0.61	21773	39.19	534	369	0.66	39736	71.52	581	153	0.28	52491	94.48

**Table 189. Science Grade 10 Scale Score Distribution (continued)**

SS	Freq	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
582	147	0.26	52638	94.74	629	15	0.03	55409	99.73
583	140	0.25	52778	94.99	630	13	0.02	55422	99.75
584	137	0.25	52915	95.24	631	6	0.01	55428	99.76
585	134	0.24	53049	95.48	632	10	0.02	55438	99.78
586	130	0.23	53179	95.72	633	15	0.03	55453	99.81
587	137	0.25	53316	95.96	634	4	0.01	55457	99.82
588	136	0.24	53452	96.21	635	11	0.02	55468	99.84
589	109	0.20	53561	96.40	636	7	0.01	55475	99.85
590	89	0.16	53650	96.56	637	5	0.01	55480	99.86
591	94	0.17	53744	96.73	638	6	0.01	55486	99.87
592	93	0.17	53837	96.90	639	6	0.01	55492	99.88
593	84	0.15	53921	97.05	640	3	0.01	55495	99.88
594	97	0.17	54018	97.23	641	4	0.01	55499	99.89
595	116	0.21	54134	97.44	642	5	0.01	55504	99.90
596	87	0.16	54221	97.59	643	4	0.01	55508	99.91
597	59	0.11	54280	97.70	644	2	0.00	55510	99.91
598	80	0.14	54360	97.84	645	2	0.00	55512	99.92
599	68	0.12	54428	97.96	646	5	0.01	55517	99.92
600	60	0.11	54488	98.07	647	5	0.01	55522	99.93
601	58	0.10	54546	98.18	648	2	0.00	55524	99.94
602	58	0.10	54604	98.28	649	2	0.00	55526	99.94
603	62	0.11	54666	98.39	650	1	0.00	55527	99.94
604	45	0.08	54711	98.47	651	2	0.00	55529	99.95
605	46	0.08	54757	98.56	652	1	0.00	55530	99.95
606	47	0.08	54804	98.64	653	5	0.01	55535	99.96
607	45	0.08	54849	98.72	654	4	0.01	55539	99.96
608	51	0.09	54900	98.81	655	1	0.00	55540	99.97
609	45	0.08	54945	98.89	656	3	0.01	55543	99.97
610	35	0.06	54980	98.96	657	2	0.00	55545	99.97
611	34	0.06	55014	99.02	658	2	0.00	55547	99.98
612	39	0.07	55053	99.09	660	4	0.01	55551	99.99
613	46	0.08	55099	99.17	661	2	0.00	55553	99.99
614	32	0.06	55131	99.23	665	1	0.00	55554	99.99
615	18	0.03	55149	99.26	666	1	0.00	55555	99.99
616	26	0.05	55175	99.31	686	1	0.00	55556	99.99
617	21	0.04	55196	99.35	693	1	0.00	55557	100
618	24	0.04	55220	99.39	714	2	0.00	55559	100
619	23	0.04	55243	99.43					
620	18	0.03	55261	99.46					
621	19	0.03	55280	99.50					
622	25	0.04	55305	99.54					
623	12	0.02	55317	99.56					
624	16	0.03	55333	99.59					
625	18	0.03	55351	99.63					
626	17	0.03	55368	99.66					
627	12	0.02	55380	99.68					
628	14	0.03	55394	99.70					

**Table 190. Scale Score Correlations by Content Standard and Subcontent Area,  
Reading Grade 3**

NAME	CS1	SA1/4	SA2	SA3	Total
MEAN	552.5	551.2	547.5	565.7	552.5
STD	84.70	97.30	113.52	128.51	84.70
N	60884	60884	60884	60884	60884
CS1		0.916	0.852	0.761	1.000
SA1/4			0.719	0.629	0.916
SA2				0.596	0.852
SA3					0.761

**Table 191. Scale Score Correlations by Content Standard and Subcontent Area,  
Reading Grade 4**

NAME	CS1	CS4	CS5	CS6	SA1/4	SA2	SA3	Total
MEAN	586.3	585.1	582.9	579.9	583.9	586.3	623.7	585.0
STD	67.79	93.96	100.52	89.84	70.71	81.95	150.66	61.64
N	61090	61090	61090	61090	61090	61090	61090	61090
CS1		0.713	0.703	0.723	0.865	0.836	0.719	0.927
CS4			0.618	0.645	0.788	0.745	0.514	0.800
CS5				0.632	0.701	0.655	0.523	0.805
CS6					0.852	0.684	0.510	0.814
SA1/4						0.753	0.572	0.927
SA2							0.549	0.855
SA3								0.672

**Table 192. Scale Score Correlations by Content Standard and Subcontent Area,  
Reading Grade 5**

NAME	CS1	CS4	CS5	CS6	SA1/4	SA2	SA3	Total
MEAN	613.7	613.7	610.8	609.7	612.1	613.0	639.5	612.2
STD	83.59	87.53	91.32	89.40	75.61	92.86	153.59	67.75
N	59809	59809	59809	59809	59809	59809	59809	59809
CS1		0.719	0.705	0.724	0.834	0.823	0.729	0.899
CS4			0.677	0.703	0.838	0.786	0.567	0.854
CS5				0.675	0.729	0.678	0.568	0.836
CS6					0.875	0.723	0.567	0.852
SA1/4						0.750	0.612	0.933
SA2							0.576	0.863
SA3								0.705

**Table 193. Scale Score Correlations by Content Standard and Subcontent Area, Reading Grade 6**

NAME	CS1	CS4	CS5	CS6	SA1/4	SA2	SA3	Total
MEAN	630.1	628.8	636.0	624.7	627.7	624.8	666.9	628.7
STD	77.52	81.96	102.22	92.81	74.97	103.08	143.75	67.49
N	58816	58816	58816	58816	58816	58816	58816	58816
CS1		0.737	0.693	0.736	0.854	0.763	0.755	0.912
CS4			0.645	0.722	0.833	0.834	0.561	0.861
CS5				0.632	0.690	0.627	0.559	0.811
CS6					0.911	0.694	0.550	0.856
SA1/4						0.743	0.607	0.938
SA2								0.827
SA3								0.704

**Table 194. Scale Score Correlations by Content Standard and Subcontent Area, Reading Grade 7**

NAME	CS1	CS4	CS5	CS6	SA1	SA2	SA3	SA4	Total
MEAN	642.5	643.7	644.4	639.1	656.8	640.0	664.7	641.2	641.0
STD	72.56	76.64	87.97	82.04	112.69	78.27	126.65	77.60	64.30
N	57766	57766	57766	57766	57766	57766	57766	57766	57766
CS1		0.758	0.727	0.745	0.700	0.826	0.775	0.765	0.924
CS4			0.686	0.720	0.612	0.872	0.591	0.801	0.879
CS5				0.675	0.563	0.696	0.568	0.678	0.842
CS6					0.692	0.734	0.573	0.864	0.866
SA1						0.599	0.468	0.590	0.727
SA2							0.575	0.719	0.883
SA3								0.576	0.716
SA4									0.873

**Table 195. Scale Score Correlations by Content Standard and Subcontent Area, Reading Grade 8**

NAME	CS1	CS4	CS5	CS6	SA1	SA2	SA3	SA4	Total
MEAN	653.7	650.4	653.9	650.9	656.9	653.5	678.9	646.3	652.1
STD	67.63	80.04	86.84	74.35	102.65	72.09	125.53	83.40	59.97
N	57130	57130	57130	57130	57130	57130	57130	57130	57130
CS1		0.740	0.714	0.735	0.716	0.849	0.756	0.706	0.925
CS4			0.668	0.694	0.638	0.826	0.557	0.763	0.857
CS5				0.669	0.578	0.683	0.540	0.644	0.835
CS6					0.696	0.707	0.558	0.830	0.858
SA1						0.601	0.489	0.565	0.742
SA2							0.547	0.667	0.881
SA3								0.521	0.697
SA4									0.825

**Table 196. Scale Score Correlations by Content Standard and Subcontent Area,  
Reading Grade 9**

NAME	CS1	CS4	CS5	CS6	SA1	SA2	SA3	SA4	Total
MEAN	662.0	661.5	668.5	657.0	658.4	662.5	679.2	656.8	661.2
STD	60.34	75.25	74.76	75.72	73.85	65.17	106.22	93.37	52.72
N	59056	59056	59056	59056	59056	59056	59056	59056	59056
CS1		0.733	0.674	0.723	0.762	0.867	0.699	0.699	0.918
CS4			0.626	0.668	0.732	0.820	0.533	0.650	0.839
CS5				0.590	0.605	0.638	0.529	0.561	0.796
CS6					0.862	0.717	0.481	0.712	0.827
SA1						0.709	0.490	0.606	0.842
SA2							0.527	0.639	0.883
SA3								0.473	0.656
SA4									0.758

**Table 197. Scale Score Correlations by Content Standard and Subcontent Area,  
Reading Grade 10**

NAME	CS1	CS4	CS5	CS6	SA1	SA2	SA3	SA4	Total
MEAN	681.1	678.8	686.0	680.5	682.3	676.4	689.4	682.5	680.6
STD	66.65	73.89	79.63	73.16	72.28	76.99	95.99	87.49	58.50
N	55237	55237	55237	55237	55237	55237	55237	55237	55237
CS1		0.765	0.719	0.758	0.835	0.824	0.782	0.665	0.927
CS4			0.657	0.722	0.795	0.836	0.605	0.666	0.867
CS5				0.643	0.647	0.662	0.609	0.588	0.822
CS6					0.809	0.789	0.560	0.829	0.873
SA1						0.737	0.578	0.632	0.878
SA2							0.573	0.647	0.876
SA3								0.530	0.732
SA4									0.771



**Table 198. Scale Score Correlations by Content Standard and Subcontent Area, Writing Grade 3**

NAME	CS2	CS3	SA5	SA7	SA8	Total
MEAN	467.3	473.0	468.9	484.1	483.4	465.3
STD	56.49	70.34	58.18	96.25	95.08	50.98
N	60770	60770	60770	60770	60770	60770
CS2		0.669	0.932	0.563	0.614	0.897
CS3			0.648	0.791	0.851	0.891
SA5				0.525	0.582	0.858
SA7					0.544	0.744
SA8						0.812

**Table 199. Scale Score Correlations by Content Standard and Subcontent Area, Writing Grade 4**

NAME	CS2	CS3	SA5	SA6	SA7	SA8	Total
MEAN	486.4	490.3	487.1	501.0	505.9	494.3	485.4
STD	56.96	65.07	64.66	97.18	93.71	89.19	52.03
N	61099	61099	61099	61099	61099	61099	61099
CS2		0.720	0.881	0.766	0.603	0.636	0.931
CS3			0.636	0.513	0.789	0.870	0.898
SA5				0.523	0.527	0.572	0.819
SA6					0.404	0.452	0.692
SA7						0.539	0.743
SA8							0.799

**Table 200. Scale Score Correlations by Content Standard and Subcontent Area, Writing Grade 5**

NAME	CS2	CS3	SA5	SA6	SA7	SA8	Total
MEAN	508.1	511.2	508.6	520.6	516.1	518.6	507.0
STD	60.54	66.23	73.99	100.22	79.73	91.66	55.38
N	59745	59745	59745	59745	59745	59745	59745
CS2		0.726	0.818	0.733	0.701	0.652	0.933
CS3			0.588	0.473	0.839	0.853	0.906
SA5				0.494	0.520	0.517	0.759
SA6					0.399	0.405	0.654
SA7						0.604	0.815
SA8							0.804

**Table 201. Scale Score Correlations by Content Standard and Subcontent Area,  
Writing Grade 6**

NAME	CS2	CS3	SA5	SA6	SA7	SA8	Total
MEAN	524.8	528.9	527.5	535.2	532.4	536.9	523.5
STD	66.92	77.05	80.84	103.54	92.47	104.00	61.63
N	58856	58856	58856	58856	58856	58856	58856
CS2		0.719	0.842	0.772	0.683	0.673	0.927
CS3			0.611	0.495	0.893	0.797	0.900
SA5				0.498	0.565	0.540	0.782
SA6					0.441	0.423	0.683
SA7						0.618	0.833
SA8							0.790

**Table 202. Scale Score Correlations by Content Standard and Subcontent Area,  
Writing Grade 7**

NAME	CS2	CS3	SA5	SA6	SA7	SA8	Total
MEAN	553.6	556.9	556.0	575.1	561.9	557.3	552.2
STD	76.55	83.56	88.11	133.80	101.27	103.77	70.36
N	57773	57773	57773	57773	57773	57773	57773
CS2		0.743	0.875	0.704	0.720	0.699	0.931
CS3			0.654	0.467	0.883	0.846	0.920
SA5				0.467	0.606	0.593	0.817
SA6					0.417	0.418	0.621
SA7						0.663	0.860
SA8							0.822

**Table 203. Scale Score Correlations by Content Standard and Subcontent Area,  
Writing Grade 8**

NAME	CS2	CS3	SA5	SA6	SA7	SA8	Total
MEAN	566.0	570.1	566.3	615.2	577.0	574.3	564.9
STD	77.15	87.22	83.47	168.37	108.29	110.70	71.36
N	57103	57103	57103	57103	57103	57103	57103
CS2		0.740	0.925	0.708	0.693	0.696	0.940
CS3			0.688	0.474	0.861	0.872	0.905
SA5				0.514	0.621	0.635	0.870
SA6					0.417	0.431	0.640
SA7						0.652	0.820
SA8							0.827

**Table 204. Scale Score Correlations by Content Standard and Subcontent Area, Writing Grade 9**

NAME	CS2	CS3	SA5	SA6	SA7	SA8	Total
MEAN	562.9	565.3	565.5	613.6	569.4	564.6	561.4
STD	86.50	90.72	97.70	180.06	109.05	105.88	79.26
N	59098	59098	59098	59098	59098	59098	59098
CS2		0.762	0.878	0.751	0.753	0.722	0.938
CS3			0.663	0.521	0.872	0.899	0.927
SA5				0.539	0.621	0.613	0.821
SA6					0.474	0.479	0.677
SA7						0.707	0.863
SA8							0.858

**Table 205. Scale Score Correlations by Content Standard and Subcontent Area, Writing Grade 10**

NAME	CS2	CS3	SA5	SA6	SA7	SA8	Total
MEAN	576.8	582.3	579.7	615.8	605.9	582.5	575.0
STD	96.55	103.41	109.08	179.28	150.23	114.01	87.97
N	55225	55225	55225	55225	55225	55225	55225
CS2		0.733	0.891	0.762	0.654	0.702	0.934
CS3			0.652	0.488	0.864	0.883	0.910
SA5				0.530	0.572	0.605	0.830
SA6					0.429	0.449	0.675
SA7						0.661	0.805
SA8							0.840

**Table 206. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 3**

NAME	CS1	CS2/3	CS4/5	CS6	Total
MEAN	468.0	476.9	471.9	469.4	467.5
STD	113.59	120.51	104.85	113.50	92.58
N	62045	62045	62045	62045	62045
CS1		0.703	0.723	0.668	0.876
CS2/3			0.716	0.671	0.874
CS4/5				0.680	0.900
CS6					0.839

**Table 207. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 4**

NAME	CS1	CS2	CS3	CS4/5	CS6	SA1	SA2	SA3	Total
MEAN	492.6	510.7	495.1	506.4	500.3	493.0	511.2	517.9	492.9
STD	92.89	123.73	106.45	104.82	105.31	87.29	125.46	132.57	78.99
N	61259	61259	61259	61259	61259	61259	61259	61259	61259
CS1		0.706	0.734	0.710	0.742	0.954	0.701	0.616	0.913
CS2			0.659	0.637	0.666	0.728	0.989	0.552	0.810
CS3				0.685	0.689	0.761	0.653	0.586	0.857
CS4/5					0.672	0.736	0.632	0.834	0.842
CS6						0.845	0.660	0.590	0.863
SA1							0.721	0.639	0.943
SA2								0.546	0.803
SA3									0.724

**Table 208. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 5**

NAME	CS1	CS2	CS3	CS4/5	CS6	SA1	SA2	SA3	Total
MEAN	529.4	525.9	525.0	521.7	525.8	533.6	525.5	530.6	519.8
STD	102.51	95.30	97.57	87.81	99.01	112.80	98.35	108.31	72.25
N	59863	59863	59863	59863	59863	59863	59863	59863	59863
CS1		0.710	0.695	0.698	0.717	0.915	0.698	0.651	0.865
CS2			0.709	0.703	0.718	0.692	0.981	0.676	0.865
CS3				0.713	0.704	0.673	0.695	0.920	0.861
CS4/5					0.692	0.683	0.690	0.669	0.865
CS6						0.704	0.705	0.666	0.868
SA1							0.680	0.630	0.837
SA2								0.655	0.850
SA3									0.808

**Table 209. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 6**

NAME	CS1	CS2	CS3	CS4/5	CS6	SA1	SA2	SA3	Total
MEAN	537.7	541.4	538.9	535.8	554.8	540.4	539.7	520.7	537.0
STD	100.31	96.83	95.17	87.96	121.47	103.25	97.84	119.99	75.06
N	58904	58904	58904	58904	58904	58904	58904	58904	58904
CS1		0.706	0.711	0.730	0.667	0.931	0.703	0.642	0.876
CS2			0.706	0.719	0.656	0.710	0.969	0.624	0.862
CS3				0.731	0.656	0.711	0.718	0.640	0.865
CS4/5					0.673	0.729	0.714	0.873	0.889
CS6						0.726	0.650	0.594	0.807
SA1							0.706	0.640	0.875
SA2								0.620	0.856
SA3									0.777

**Table 210. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 7**

NAME	CS1/6	CS2	CS3	CS4/5	SA1	SA2	Total
MEAN	552.3	549.8	549.9	542.6	550.7	536.5	551.6
STD	83.68	97.40	92.70	98.96	94.61	109.68	75.10
N	57836	57836	57836	57836	57836	57836	57836
CS1/6		0.773	0.760	0.741	0.862	0.717	0.919
CS2			0.742	0.714	0.718	0.682	0.888
CS3				0.713	0.766	0.681	0.880
CS4/5					0.691	0.949	0.865
SA1						0.662	0.850
SA2							0.830

**Table 211. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 8**

NAME	CS1/6	CS2	CS3	CS4/5	SA1	SA2	SA3	Total
MEAN	564.5	576.9	575.7	570.0	577.8	568.7	556.0	575.1
STD	100.84	84.97	90.84	90.00	87.54	98.77	128.79	71.86
N	57191	57191	57191	57191	57191	57191	57191	57191
CS1/6		0.712	0.692	0.689	0.696	0.827	0.605	0.843
CS2			0.743	0.738	0.978	0.685	0.647	0.911
CS3				0.707	0.727	0.680	0.619	0.873
CS4/5					0.721	0.729	0.843	0.865
SA1						0.670	0.634	0.891
SA2							0.587	0.808
SA3								0.754

**Table 212. Scale Score Correlations by Content Standard and Subcontent Area,  
Mathematics Grade 9**

NAME	CS1/6	CS2	CS3	CS4/5	SA1	SA2	Total
MEAN	563.2	578.2	575.8	556.1	575.7	566.4	578.1
STD	107.03	78.55	84.65	108.43	86.28	105.73	71.87
N	59144	59144	59144	59144	59144	59144	59144
CS1/6		0.719	0.674	0.642	0.691	0.858	0.816
CS2			0.776	0.708	0.928	0.728	0.936
CS3				0.668	0.790	0.687	0.889
CS4/5					0.679	0.749	0.803
SA1						0.699	0.905
SA2							0.827

**Table 213. Scale Score Correlations by Content Standard and Subcontent Area,  
Mathematics Grade 10**

NAME	CS1/6	CS2	CS3	CS4/5	SA1	SA2	Total
MEAN	568.5	584.0	587.8	575.3	584.2	589.0	587.7
STD	110.89	87.39	81.02	99.81	90.16	98.86	73.16
N	55419	55419	55419	55419	55419	55419	55419
CS1/6		0.703	0.673	0.676	0.661	0.537	0.807
CS2			0.750	0.746	0.848	0.602	0.909
CS3				0.713	0.816	0.775	0.891
CS4/5					0.711	0.580	0.867
SA1						0.576	0.877
SA2							0.701

**Table 214. Scale Score Correlations by Content Standard and Subcontent Area,  
Science Grade 5**

NAME	CS1/5	CS2	CS3	CS4	SA1	SA2	Total
MEAN	499.4	501.3	505.7	500.8	503.4	504.7	498.7
STD	68.66	84.53	84.40	78.79	83.17	89.17	63.22
N	60043	60043	60043	60043	60043	60043	60043
CS1/5		0.737	0.675	0.707	0.889	0.845	0.943
CS2			0.631	0.670	0.651	0.628	0.852
CS3				0.632	0.605	0.571	0.790
CS4					0.631	0.598	0.839
SA1						0.625	0.837
SA2							0.797

**Table 215. Scale Score Correlations by Content Standard and Subcontent Area,  
Science Grade 8**

NAME	CS1/5	CS2	CS3	CS4	SA1	SA2	SA3	SA5	SA6	Total
MEAN	498.5	491.0	495.2	494.3	498.5	502.6	490.0	491.7	494.3	498.5
STD	66.46	85.82	74.72	76.77	75.90	88.70	93.93	88.83	90.09	60.93
N	57478	57478	57478	57478	57478	57478	57478	57478	57478	57478
CS1/5		0.700	0.763	0.731	0.927	0.854	0.644	0.652	0.626	0.954
CS2			0.653	0.636	0.652	0.591	0.919	0.578	0.550	0.797
CS3				0.679	0.711	0.641	0.605	0.860	0.588	0.862
CS4					0.677	0.615	0.591	0.589	0.848	0.831
SA1						0.685	0.602	0.608	0.578	0.884
SA2							0.539	0.546	0.524	0.807
SA3								0.535	0.514	0.736
SA5								1.000	0.515	0.743
SA6								0.515		0.713

**Table 216. Scale Score Correlations by Content Standard and Subcontent Area,  
Science Grade 10**

NAME	CS1/5	CS2	CS3	CS4	SA1	SA2	SA4	SA5	SA6	Total
MEAN	495.5	484.1	491.2	491.8	497.0	500.7	497.6	481.8	493.6	494.8
STD	67.70	88.74	79.40	79.40	80.84	82.09	115.93	99.40	84.52	64.12
N	55559	55559	55559	55559	55559	55559	55559	55559	55559	55559
CS1/5		0.700	0.717	0.739	0.892	0.886	0.561	0.587	0.699	0.956
CS2			0.608	0.641	0.622	0.624	0.714	0.500	0.603	0.786
CS3				0.669	0.635	0.634	0.488	0.804	0.630	0.811
CS4					0.650	0.652	0.487	0.549	0.938	0.851
SA1						0.688	0.511	0.521	0.615	0.846
SA2							0.501	0.523	0.617	0.843
SA4								0.409	0.459	0.625
SA5									0.518	0.663
SA6										0.803

**Table 217. Scale Score Correlations by Content Standard and Subcontent Area,  
Spanish Reading Grade 3**

NAME	CS1	SA1/4	SA2	SA3	Total
MEAN	519.3	519.4	519.1	522.3	519.3
STD	52.75	63.68	63.23	74.65	52.75
N	1210	1210	1210	1210	1210
CS1		0.922	0.831	0.761	1.000
SA1/4			0.675	0.651	0.922
SA2				0.549	0.831
SA3					0.761

**Table 218. Scale Score Correlations by Content Standard and Subcontent Area,  
Spanish Reading Grade 4**

NAME	CS1	CS4	CS5	CS6	SA1/4	SA2	SA3	Total
MEAN	532.5	528.6	533.3	527.7	528.7	532.1	534.5	532.2
STD	44.12	55.98	69.19	57.94	46.26	49.19	71.56	41.06
N	113	113	113	113	113	113	113	113
CS1		0.658	0.718	0.666	0.851	0.830	0.722	0.919
CS4			0.751	0.512	0.826	0.698	0.500	0.830
CS5				0.591	0.787	0.687	0.449	0.863
CS6					0.724	0.684	0.482	0.748
SA1/4						0.714	0.581	0.955
SA2							0.548	0.848
SA3								0.663



**Table 219. Scale Score Correlations by Content Standard and Subcontent Area,  
Spanish Writing Grade 3**

NAME	CS2	CS3	SA5	SA7	SA8	Total
MEAN	517.7	502.4	537.3	505.6	511.6	507.6
STD	82.28	80.98	109.64	91.70	122.54	74.24
N	1211	1211	1211	1211	1211	1211
CS2		0.767	0.888	0.665	0.584	0.936
CS3			0.637	0.907	0.807	0.934
SA5				0.496	0.496	0.810
SA7					0.579	0.833
SA8						0.742

**Table 220. Scale Score Correlations by Content Standard and Subcontent Area,  
Spanish Writing Grade 4**

NAME	CS2	CS3	SA5	SA6	SA7	SA8	Total
MEAN	507.7	518.1	506.1	515.4	521.1	494.9	514.7
STD	43.51	41.75	54.10	83.83	60.60	90.54	37.86
N	113	113	113	113	113	113	113
CS2		0.661	0.835	0.705	0.501	0.405	0.864
CS3			0.556	0.431	0.852	0.561	0.940
SA5				0.402	0.446	0.402	0.723
SA6					0.274	0.130	0.587
SA7						0.322	0.778
SA8							0.553

**Table 221. Cronbach Alpha Reliability Coefficients for Content Standards**

<b>Content</b>	<b>Grade</b>	<b>Alpha cs1</b>	<b>Alpha cs2</b>	<b>Alpha cs3</b>	<b>Alpha cs4</b>	<b>Alpha cs5</b>	<b>Alpha cs6</b>	<b>Total Alpha</b>
Reading	03	0.90						0.90
Reading	04	0.86			0.76	0.75	0.74	0.94
Reading	05	0.85			0.71	0.70	0.71	0.93
Reading	06	0.83			0.69	0.80	0.74	0.93
Reading	07	0.78			0.74	0.76	0.70	0.92
Reading	08	0.79			0.70	0.75	0.68	0.92
Reading	09	0.80			0.73	0.78	0.72	0.93
Reading	10	0.81			0.70	0.77	0.76	0.93
Spanish Reading	03	0.88						0.88
Spanish Reading	04	0.84			0.67	0.70	0.59	0.91
Writing	03		0.78	0.87				0.91
Writing	04		0.81	0.86				0.91
Writing	05		0.82	0.86				0.91
Writing	06		0.81	0.86				0.91
Writing	07		0.83	0.85				0.91
Writing	08		0.83	0.86				0.91
Writing	09		0.83	0.86				0.91
Writing	10		0.83	0.89				0.92
Spanish Writing	03		0.83	0.86				0.91
Spanish Writing	04		0.72	0.79				0.85
Mathematics	03	0.69	0.75		0.73		0.66	0.91
Mathematics	04	0.78	0.71	0.75	0.79		0.77	0.94
Mathematics	05	0.81	0.75	0.75	0.73		0.79	0.94
Mathematics	06	0.77	0.73	0.73	0.73		0.73	0.93
Mathematics	07	0.81	0.76	0.70	0.80			0.93
Mathematics	08	0.80	0.80	0.73	0.75			0.93
Mathematics	09	0.73	0.79	0.75	0.79			0.93
Mathematics	10	0.70	0.80	0.66	0.76			0.92
Science	05	0.85	0.74	0.62	0.70			0.92
Science	08	0.86	0.70	0.71	0.69			0.93
Science	10	0.85	0.68	0.65	0.70			0.92

**Table 222. Cronbach Alpha Reliability Coefficients for Subcontent Areas**

<b>Content</b>	<b>Grade</b>	<b>Alpha sa1</b>	<b>Alpha sa2</b>	<b>Alpha sa3</b>	<b>Alpha sa4</b>	<b>Alpha sa5</b>	<b>Alpha sa6</b>	<b>Alpha sa7</b>	<b>Alpha sa8</b>
Reading	3	0.81	0.75	0.69					
Reading	4	0.86	0.81	0.70					
Reading	5	0.85	0.75	0.67					
Reading	6	0.84	0.73	0.68					
Reading	7	0.67	0.74	0.66	0.71				
Reading	8	0.60	0.75	0.69	0.70				
Reading	9	0.77	0.77	0.61	0.60				
Reading	10	0.77	0.78	0.65	0.63				
Spanish Reading	3	0.82	0.64	0.67					
Spanish Reading	4	0.81	0.74	0.54					
Writing	3					0.79		0.66	0.81
Writing	4					0.67	0.67	0.74	0.77
Writing	5					0.63	0.69	0.79	0.81
Writing	6					0.64	0.70	0.81	0.77
Writing	7					0.71	0.69	0.81	0.72
Writing	8					0.74	0.68	0.80	0.77
Writing	9					0.67	0.70	0.82	0.77
Writing	10					0.70	0.71	0.87	0.72
Spanish Writing	3					0.87		0.81	0.73
Spanish Writing	4					0.58	0.66	0.76	0.65
Mathematics	3								
Mathematics	4	0.83	0.68	0.50					
Mathematics	5	0.80	0.71	0.68					
Mathematics	6	0.78	0.72	0.63					
Mathematics	7	0.70	0.76						
Mathematics	8	0.75	0.65	0.56					
Mathematics	9	0.76	0.78						
Mathematics	10	0.72	0.39						
Science	5	0.72	0.71						
Science	8	0.76	0.72	0.57		0.58	0.51		
Science	10	0.69	0.71		0.46	0.54	0.61		

**Table 223. Subgroup Reliability for the CSAP Mathematics Tests**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min	Max	ALPHA	SEM
3	No Disability	56561	475.30	88.59	150	700	150	700	0.900	27.99
	Disability	5483	386.72	94.21	150	700	150	700	0.907	28.80
	No IEP	56565	475.30	88.59	150	700	150	700	0.900	27.99
	IEP	5478	386.68	94.21	150	700	150	700	0.907	28.80
	No Accommodation	50949	484.56	85.91	150	700	150	700	0.893	28.09
	Accommodation	11044	388.57	80.64	150	700	150	700	0.881	27.85
	Am. Indian/AK	716	439.47	82.59	150	700	150	700	0.892	27.09
	Asian/Pac. Isl.	2439	498.77	97.15	150	700	150	700	0.916	28.09
	Black	3618	418.48	90.67	150	700	150	700	0.907	27.62
	Hispanic	18834	423.75	84.72	150	700	150	700	0.895	27.45
	White	36437	493.40	85.58	150	700	150	700	0.893	28.00
	Free Lunch Elig.	21703	422.49	84.86	150	700	150	700	0.896	27.39
	Reduced Lunch Elig.	5059	454.04	84.02	150	700	150	700	0.894	27.38
	Not FRL Elig.	35264	497.11	86.50	150	700	150	700	0.895	28.09
	Female	30553	464.14	89.56	150	700	150	700	0.904	27.74
	Male	31488	470.71	95.31	150	700	150	700	0.913	28.07
	Lang. Prof. NA	49831	480.04	89.74	150	700	150	700	0.903	27.91
	Lang. Prof. NEP	2984	351.46	77.47	150	700	150	700	0.860	29.03
	Lang. Prof. LEP	7844	424.78	71.25	150	700	150	700	0.861	26.52
	Lang. Prof. FEP	1385	507.29	77.28	150	700	197	700	0.861	28.77
4	Not Mig. or Immig.	60973	468.42	92.26	150	700	150	700	0.908	27.95
	Mig. or Immig.	1068	413.96	95.10	150	700	150	700	0.909	28.67
	No Disability	55510	501.13	73.69	180	780	180	780	0.934	18.87
	Disability	5745	412.98	83.75	180	780	180	741	0.941	20.43
	No IEP	55510	501.13	73.69	180	780	180	780	0.934	18.87
	IEP	5741	412.87	83.68	180	780	180	741	0.940	20.43
	No Accommodation	50595	507.56	71.31	180	780	180	780	0.930	18.87
	Accommodation	10632	422.96	76.31	180	780	180	780	0.932	19.88
	Am. Indian/AK	696	463.36	79.26	180	780	199	759	0.943	18.89
	Asian/Pac. Isl.	2364	521.55	84.55	180	780	180	780	0.946	19.58
	Black	3708	454.61	79.32	180	780	180	706	0.942	19.04
	Hispanic	18599	458.17	74.63	180	780	180	780	0.937	18.80
	White	35891	513.48	72.45	180	780	180	780	0.933	18.72
	Free Lunch Elig.	21133	455.02	75.03	180	780	180	780	0.937	18.90
	Reduced Lunch Elig.	5243	481.24	71.32	180	780	180	780	0.932	18.54
	Not FRL Elig.	34857	517.56	72.70	180	780	180	780	0.933	18.79
	Female	30014	491.17	76.57	180	780	180	780	0.940	18.73
	Male	31244	494.49	81.21	180	780	180	780	0.945	18.98
	Lang. Prof. NA	49644	502.64	76.11	180	780	180	780	0.939	18.75
	Lang. Prof. NEP	2156	376.63	74.67	180	780	180	643	0.918	21.36
	Lang. Prof. LEP	7066	451.17	60.43	180	780	184	761	0.909	18.26
	Lang. Prof. FEP	2391	517.81	61.86	180	780	180	780	0.904	19.13
	Not Mig. or Immig.	60352	493.69	78.56	180	780	180	780	0.942	18.86
	Mig. or Immig.	899	437.34	87.46	180	780	180	759	0.946	20.38

**Table 223. Subgroup Reliability for the CSAP Mathematics Tests (Continued)**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min	Max	ALPHA	SEM
5	No Disability	53886	528.34	66.81	220	800	220	800	0.936	16.88
	Disability	5976	442.80	73.83	220	800	220	711	0.930	19.50
	No IEP	53891	528.34	66.82	220	800	220	800	0.936	16.88
	IEP	5968	442.69	73.79	220	800	220	711	0.930	19.51
	No Accommodation	50131	532.63	65.31	220	800	220	800	0.933	16.85
	Accommodation	9702	453.51	70.10	220	800	220	800	0.927	18.96
	Am. Indian/AK	684	488.94	72.23	220	800	220	790	0.938	18.01
	Asian/Pac. Isl.	2248	549.24	77.79	220	800	220	800	0.950	17.47
	Black	3648	483.86	74.51	220	800	220	736	0.943	17.85
	Hispanic	17802	489.34	66.52	220	800	220	800	0.934	17.15
	White	35481	537.50	67.44	220	800	220	800	0.937	16.87
	Free Lunch Elig.	20106	484.72	67.69	220	800	220	800	0.934	17.45
	Reduced Lunch Elig.	5045	507.93	64.95	220	800	230	800	0.934	16.70
	Not FRL Elig.	34698	541.85	67.20	220	800	220	800	0.937	16.91
	Female	29327	519.60	69.16	220	800	220	800	0.940	16.93
	Male	30534	519.99	75.10	220	800	220	800	0.947	17.30
	Lang. Prof. NA	49173	527.40	70.63	220	800	220	800	0.942	17.03
	Lang. Prof. NEP	1228	409.96	70.91	220	800	220	644	0.915	20.71
	Lang. Prof. LEP	5955	472.22	54.61	220	800	250	800	0.904	16.92
	Lang. Prof. FEP	3505	532.39	57.51	220	800	220	800	0.918	16.46
	Not Mig. or Immig.	59070	520.43	71.90	220	800	220	800	0.943	17.12
	Mig. or Immig.	788	472.65	82.22	220	800	220	800	0.948	18.82
6	No Disability	53244	546.15	68.27	240	830	240	830	0.927	18.47
	Disability	5657	451.26	81.61	240	830	240	738	0.907	24.93
	No IEP	53243	546.15	68.27	240	830	240	830	0.927	18.47
	IEP	5654	451.23	81.63	240	830	240	738	0.907	24.92
	No Accommodation	51296	547.98	67.84	240	830	240	830	0.926	18.42
	Accommodation	7527	462.31	79.27	240	830	240	760	0.908	24.08
	Am. Indian/AK	712	508.89	73.67	240	830	240	726	0.918	21.08
	Asian/Pac. Isl.	2266	569.80	78.03	240	830	240	812	0.939	19.27
	Black	3629	501.56	78.33	240	830	240	830	0.925	21.42
	Hispanic	16975	503.77	70.99	240	830	240	810	0.916	20.54
	White	35321	555.13	69.07	240	830	240	830	0.929	18.42
	Free Lunch Elig.	19037	499.59	72.20	240	830	240	808	0.916	20.94
	Reduced Lunch Elig.	4933	522.34	67.84	240	830	240	830	0.918	19.39
	Not FRL Elig.	34908	559.56	68.62	240	830	240	830	0.928	18.39
	Female	28999	538.91	71.93	240	830	240	830	0.931	18.91
	Male	29903	535.21	77.93	240	830	240	830	0.937	19.64
	Lang. Prof. NA	48672	544.77	72.70	240	830	240	830	0.932	18.93
	Lang. Prof. NEP	934	415.58	85.40	240	830	240	673	0.885	28.97
	Lang. Prof. LEP	5102	478.50	60.91	240	830	240	732	0.876	21.41
	Lang. Prof. FEP	4195	545.45	58.68	240	830	240	830	0.908	17.84
	Not Mig. or Immig.	58124	537.72	74.62	240	830	240	830	0.933	19.24
	Mig. or Immig.	772	485.88	89.69	240	830	240	716	0.931	23.64

**Table 223. Subgroup Reliability for the CSAP Mathematics Tests (Continued)**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min	Max	ALPHA	SEM
7	No Disability	52483	560.52	68.73	280	860	280	860	0.925	18.86
	Disability	5351	464.58	79.23	280	860	280	747	0.891	26.19
	No IEP	52474	560.53	68.73	280	860	280	860	0.925	18.86
	IEP	5352	464.59	79.23	280	860	280	747	0.891	26.19
	No Accommodation	51214	560.97	68.90	280	860	280	860	0.925	18.90
	Accommodation	6556	478.72	81.48	280	860	280	797	0.908	24.76
	Am. Indian/AK	690	525.80	76.10	280	860	280	723	0.924	21.00
	Asian/Pac. Isl.	2239	585.81	74.43	280	860	280	858	0.937	18.71
	Black	3319	516.96	74.23	280	860	280	777	0.912	22.00
	Hispanic	16247	515.92	72.30	280	860	280	773	0.907	22.04
	White	35340	569.67	68.81	280	860	280	860	0.926	18.76
	Free Lunch Elig.	17755	511.95	72.40	280	860	280	816	0.905	22.35
	Reduced Lunch Elig.	4658	537.55	67.62	280	860	280	741	0.911	20.17
	Not FRL Elig.	35398	573.42	68.48	280	860	280	860	0.926	18.60
	Female	28297	552.66	71.10	280	860	280	860	0.927	19.23
	Male	29538	550.68	78.73	280	860	280	858	0.933	20.42
	Lang. Prof. NA	48196	559.42	72.44	280	860	280	860	0.928	19.39
	Lang. Prof. NEP	785	428.03	87.65	280	860	280	711	0.878	30.57
	Lang. Prof. LEP	4203	485.73	62.52	280	860	280	760	0.853	23.95
	Lang. Prof. FEP	4651	551.50	61.57	280	860	280	788	0.906	18.85
	Not Mig. or Immig.	57063	552.38	74.63	280	860	280	860	0.929	19.82
	Mig. or Immig.	763	496.84	88.87	280	860	280	737	0.928	23.86
8	No Disability	52277	583.17	65.54	310	890	310	890	0.926	17.84
	Disability	4913	488.75	79.13	310	890	310	788	0.882	27.21
	No IEP	52277	583.18	65.53	310	890	310	890	0.926	17.84
	IEP	4907	488.68	79.11	310	890	310	788	0.882	27.22
	No Accommodation	51094	583.03	65.73	310	890	310	890	0.926	17.89
	Accommodation	6018	507.23	84.84	310	890	310	845	0.917	24.50
	Am. Indian/AK	709	551.04	71.70	310	890	310	720	0.915	20.96
	Asian/Pac. Isl.	2108	607.00	75.06	310	890	310	890	0.939	18.53
	Black	3431	539.25	72.98	310	890	310	773	0.909	22.02
	Hispanic	15679	541.54	68.80	310	890	310	890	0.904	21.27
	White	35262	592.02	65.79	310	890	310	890	0.927	17.76
	Free Lunch Elig.	16995	538.23	70.07	310	890	310	890	0.904	21.68
	Reduced Lunch Elig.	4544	561.26	64.60	310	890	310	783	0.910	19.39
	Not FRL Elig.	35630	594.41	66.05	310	890	310	890	0.928	17.77
	Female	28014	574.12	67.95	310	890	310	890	0.926	18.47
	Male	29173	575.97	75.41	310	890	310	890	0.934	19.43
	Lang. Prof. NA	48180	582.20	69.37	310	890	310	890	0.929	18.45
	Lang. Prof. NEP	674	452.11	82.80	310	890	310	719	0.865	30.42
	Lang. Prof. LEP	3553	508.40	63.11	310	890	310	771	0.846	24.74
	Lang. Prof. FEP	4782	570.01	58.12	310	890	310	879	0.907	17.70
	Not Mig. or Immig.	56422	575.85	71.33	310	890	310	890	0.930	18.90
	Mig. or Immig.	762	517.48	85.55	310	890	310	792	0.917	24.60

**Table 223. Subgroup Reliability for the CSAP Mathematics Tests (Continued)**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min	Max	ALPHA	SEM
9	No Disability	54148	585.91	66.11	340	920	340	920	0.923	18.34
	Disability	4990	493.82	77.69	340	920	340	823	0.873	27.71
	No IEP	54132	585.92	66.11	340	920	340	920	0.923	18.34
	IEP	4990	493.81	77.69	340	920	340	823	0.873	27.71
	No Accommodation	55259	583.47	68.13	340	920	340	920	0.924	18.77
	Accommodation	3782	499.77	79.43	340	920	340	773	0.889	26.49
	Am. Indian/AK	694	552.37	71.14	340	920	340	721	0.909	21.42
	Asian/Pac. Isl.	2248	604.24	77.48	340	920	340	920	0.942	18.63
	Black	3609	538.30	72.39	340	920	340	823	0.892	23.78
	Hispanic	15908	542.95	68.93	340	920	340	800	0.890	22.87
	White	36682	596.20	64.93	340	920	340	920	0.924	17.94
	Free Lunch Elig.	16048	539.88	69.80	340	920	340	770	0.886	23.61
	Reduced Lunch Elig.	4327	564.64	64.92	340	920	340	746	0.899	20.59
	Not FRL Elig.	38739	595.51	66.82	340	920	340	920	0.927	18.10
	Female	28741	578.17	68.17	340	920	340	902	0.920	19.24
	Male	30401	578.11	75.21	340	920	340	920	0.931	19.75
	Lang. Prof. NA	50365	585.44	69.39	340	920	340	920	0.926	18.92
	Lang. Prof. NEP	924	460.06	73.43	340	920	340	659	0.800	32.84
	Lang. Prof. LEP	3031	510.76	61.84	340	920	340	732	0.822	26.07
	Lang. Prof. FEP	4811	566.92	58.47	340	920	340	863	0.893	19.11
	Not Mig. or Immig.	58306	579.07	71.26	340	920	340	920	0.926	19.41
	Mig. or Immig.	812	511.91	83.80	340	920	340	716	0.905	25.82
10	No Disability	51154	595.13	67.81	370	950	370	904	0.915	19.78
	Disability	4255	498.73	76.33	370	950	370	775	0.840	30.51
	No IEP	51151	595.13	67.82	370	950	370	904	0.915	19.78
	IEP	4253	498.71	76.35	370	950	370	775	0.840	30.49
	No Accommodation	52275	592.67	69.63	370	950	370	904	0.916	20.20
	Accommodation	3064	503.07	79.88	370	950	370	766	0.867	29.10
	Am. Indian/AK	685	561.13	73.77	370	950	370	733	0.894	23.98
	Asian/Pac. Isl.	2026	614.04	78.65	370	950	370	904	0.938	19.58
	Black	3334	547.24	72.43	370	950	370	761	0.866	26.48
	Hispanic	14255	551.61	69.52	370	950	370	807	0.867	25.32
	White	35117	605.23	66.92	370	950	370	904	0.917	19.32
	Free Lunch Elig.	13626	546.35	71.45	370	950	370	803	0.865	26.21
	Reduced Lunch Elig.	3619	574.02	66.28	370	950	370	795	0.887	22.26
	Not FRL Elig.	38160	603.80	68.15	370	950	370	904	0.919	19.44
	Female	27162	586.32	68.91	370	950	370	847	0.909	20.83
	Male	28252	589.08	77.00	370	950	370	904	0.924	21.20
	Lang. Prof. NA	47650	594.81	70.73	370	950	370	904	0.917	20.32
	Lang. Prof. NEP	784	468.23	73.30	370	950	370	766	0.805	32.38
	Lang. Prof. LEP	2345	515.31	64.23	370	950	370	711	0.796	29.00
	Lang. Prof. FEP	4628	571.78	60.98	370	950	370	810	0.877	21.36
	Not Mig. or Immig.	54652	588.61	72.58	370	950	370	904	0.917	20.89
	Mig. or Immig.	752	523.47	85.15	370	950	370	767	0.894	27.78

**Table 224. Subgroup Reliability for the CSAP Reading Tests**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min	Max	ALPHA	SEM
3	No Disability	55515	561.83	74.52	150	795	150	795	0.900	23.62
	Disability	5368	456.05	117.20	150	795	150	731	0.901	36.91
	No IEP	55512	561.84	74.52	150	795	150	795	0.900	23.62
	IEP	5367	456.03	117.20	150	795	150	731	0.901	36.93
	No Accommodation	50567	568.41	70.92	150	795	150	795	0.894	23.12
	Accommodation	10275	474.21	101.80	150	795	150	747	0.880	35.31
	Am. Indian/AK	716	529.63	82.12	150	795	150	738	0.891	27.11
	Asian/Pac. Isl.	2437	569.72	85.28	150	795	150	795	0.914	25.05
	Black	3600	517.93	94.85	150	795	150	795	0.899	30.18
	Hispanic	17630	513.65	90.01	150	795	150	795	0.893	29.42
	White	36500	573.99	72.19	150	795	150	795	0.898	23.02
	Free Lunch Elig.	20636	511.72	92.08	150	795	150	795	0.894	30.05
	Reduced Lunch Elig.	4969	541.24	78.32	150	795	150	795	0.895	25.44
	Not FRL Elig.	35239	577.95	70.15	150	795	150	795	0.896	22.64
	Female	30013	561.13	77.89	150	795	150	795	0.906	23.90
	Male	30869	544.12	90.05	150	795	150	795	0.913	26.58
	Lang. Prof. NA	49919	563.97	77.74	150	795	150	795	0.904	24.12
	Lang. Prof. NEP	2237	404.59	113.40	150	795	150	660	0.795	51.33
	Lang. Prof. LEP	7342	513.72	68.02	150	795	150	751	0.843	26.93
	Lang. Prof. FEP	1383	583.78	56.86	150	795	150	795	0.840	22.71
4	Not Mig. or Immig.	59915	553.49	83.90	150	795	150	795	0.910	25.23
	Mig. or Immig.	963	491.30	108.80	150	795	150	717	0.907	33.16
	No Disability	55377	592.80	51.47	180	940	180	778	0.933	13.33
	Disability	5704	509.24	92.97	180	940	180	712	0.934	23.91
	No IEP	55378	592.80	51.46	180	940	180	778	0.933	13.32
	IEP	5702	509.19	92.98	180	940	180	712	0.934	23.91
	No Accommodation	49473	597.20	49.51	180	940	180	778	0.929	13.20
	Accommodation	11593	532.93	78.77	180	940	180	724	0.933	20.33
	Am. Indian/AK	688	569.58	58.67	180	940	180	688	0.940	14.40
	Asian/Pac. Isl.	2355	595.92	60.78	180	940	180	778	0.941	14.76
	Black	3703	562.92	65.65	180	940	180	709	0.938	16.37
	Hispanic	18484	557.17	64.67	180	940	180	747	0.933	16.79
	White	35856	601.19	53.28	180	940	180	762	0.933	13.75
	Free Lunch Elig.	21021	556.00	65.95	180	940	180	731	0.933	17.05
	Reduced Lunch Elig.	5234	577.30	55.45	180	940	180	758	0.931	14.61
	Not FRL Elig.	34805	603.66	52.08	180	940	180	778	0.932	13.59
	Female	29938	591.58	55.67	180	940	180	778	0.939	13.76
	Male	31149	578.66	66.26	180	940	180	758	0.945	15.60
	Lang. Prof. NA	49604	594.09	56.02	180	940	180	778	0.937	14.05
	Lang. Prof. NEP	2036	466.92	92.40	180	940	180	639	0.861	34.43
	Lang. Prof. LEP	7054	549.85	45.20	180	940	180	691	0.890	14.98
	Lang. Prof. FEP	2388	600.47	34.55	180	940	180	756	0.865	12.69
	Not Mig. or Immig.	60244	585.82	60.79	180	940	180	778	0.942	14.66
	Mig. or Immig.	832	525.53	88.01	180	940	180	686	0.940	21.48



**Table 224. Subgroup Reliability for the CSAP Reading Tests (Continued)**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min	Max	ALPHA	SEM
5	No Disability	53834	621.49	58.08	220	955	220	855	0.921	16.33
	Disability	5954	528.36	88.28	220	955	220	781	0.921	24.85
	No IEP	53835	621.50	58.07	220	955	220	855	0.921	16.32
	IEP	5952	528.29	88.28	220	955	220	781	0.921	24.86
	No Accommodation	49736	625.14	56.70	220	955	220	855	0.918	16.25
	Accommodation	10046	548.19	80.48	220	955	220	822	0.921	22.64
	Am. Indian/AK	681	585.73	71.71	220	955	220	775	0.931	18.84
	Asian/Pac. Isl.	2235	627.23	70.41	220	955	220	835	0.939	17.35
	Black	3654	585.85	75.37	220	955	220	779	0.930	19.98
	Hispanic	17784	582.50	67.39	220	955	220	807	0.922	18.82
	White	35435	629.41	60.26	220	955	220	855	0.925	16.54
	Free Lunch Elig.	20077	578.99	70.61	220	955	220	798	0.923	19.57
	Reduced Lunch Elig.	5027	601.91	61.13	220	955	220	841	0.920	17.27
	Not FRL Elig.	34670	632.96	58.33	220	955	220	855	0.922	16.30
	Female	29296	619.98	63.46	220	955	220	855	0.930	16.80
	Male	30494	604.76	70.84	220	955	220	841	0.935	18.03
	Lang. Prof. NA	49124	621.21	63.45	220	955	220	855	0.929	16.95
	Lang. Prof. NEP	1208	471.49	94.02	220	955	220	703	0.868	34.18
	Lang. Prof. LEP	5949	561.04	49.83	220	955	220	752	0.866	18.25
	Lang. Prof. FEP	3507	621.50	46.15	220	955	220	816	0.882	15.84
	Not Mig. or Immig.	58999	613.17	66.83	220	955	220	855	0.933	17.36
	Mig. or Immig.	785	541.03	94.19	220	955	220	742	0.933	24.43
6	No Disability	53170	637.75	58.62	260	970	260	934	0.925	16.06
	Disability	5644	543.44	83.97	260	970	260	845	0.919	23.97
	No IEP	53166	637.75	58.62	260	970	260	934	0.925	16.06
	IEP	5643	543.43	83.97	260	970	260	845	0.919	23.97
	No Accommodation	50134	640.02	57.77	260	970	260	934	0.923	16.01
	Accommodation	8593	562.51	80.89	260	970	260	869	0.927	21.91
	Am. Indian/AK	710	607.35	68.78	260	970	260	790	0.928	18.41
	Asian/Pac. Isl.	2263	645.40	69.47	260	970	260	856	0.939	17.21
	Black	3617	604.91	71.05	260	970	260	847	0.933	18.35
	Hispanic	16938	596.43	68.41	260	970	260	866	0.925	18.71
	White	35288	645.99	59.49	260	970	260	934	0.928	16.02
	Free Lunch Elig.	18983	593.49	69.06	260	970	260	845	0.925	18.90
	Reduced Lunch Elig.	4925	617.09	60.89	260	970	260	791	0.921	17.10
	Not FRL Elig.	34884	649.54	58.52	260	970	260	934	0.925	16.01
	Female	28954	638.00	63.17	260	970	260	895	0.932	16.45
	Male	29859	619.68	70.26	260	970	260	934	0.938	17.43
	Lang. Prof. NA	48611	638.13	62.37	260	970	260	934	0.931	16.39
	Lang. Prof. NEP	928	474.91	96.21	260	970	260	700	0.874	34.12
	Lang. Prof. LEP	5081	564.69	53.39	260	970	260	757	0.864	19.71
	Lang. Prof. FEP	4195	630.96	45.20	260	970	260	845	0.880	15.68
	Not Mig. or Immig.	58038	629.70	66.49	260	970	260	934	0.936	16.89
	Mig. or Immig.	770	553.34	94.08	260	970	260	763	0.941	22.91

**Table 224. Subgroup Reliability for the CSAP Reading Tests (Continued)**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min	Max	ALPHA	SEM
7	No Disability	52425	649.20	56.67	300	980	300	980	0.914	16.58
	Disability	5340	560.28	77.59	300	980	300	759	0.917	22.31
	No IEP	52419	649.21	56.66	300	980	300	980	0.914	16.58
	IEP	5338	560.25	77.61	300	980	300	759	0.917	22.31
	No Accommodation	51354	649.47	56.74	300	980	300	980	0.915	16.58
	Accommodation	6340	572.09	78.91	300	980	300	808	0.926	21.42
	Am. Indian/AK	688	622.60	66.62	300	980	300	790	0.928	17.92
	Asian/Pac. Isl.	2237	655.64	68.01	300	980	300	844	0.934	17.49
	Black	3319	616.81	67.04	300	980	300	788	0.926	18.26
	Hispanic	16224	610.16	65.07	300	980	300	808	0.920	18.43
	White	35297	656.85	57.04	300	980	300	980	0.917	16.44
	Free Lunch Elig.	17727	606.88	66.82	300	980	300	844	0.920	18.86
	Reduced Lunch Elig.	4650	630.25	58.15	300	980	300	801	0.914	17.03
	Not FRL Elig.	35365	659.50	55.92	300	980	300	980	0.915	16.34
	Female	28278	650.89	60.02	300	980	300	980	0.922	16.79
	Male	29486	631.48	66.79	300	980	300	844	0.932	17.47
	Lang. Prof. NA	48149	649.43	59.66	300	980	300	980	0.922	16.68
	Lang. Prof. NEP	776	486.74	87.68	300	980	300	687	0.866	32.12
	Lang. Prof. LEP	4193	574.45	51.21	300	980	300	740	0.853	19.62
	Lang. Prof. FEP	4647	639.25	46.37	300	980	300	819	0.873	16.52
	Not Mig. or Immig.	57000	641.98	63.30	300	980	300	980	0.927	17.08
	Mig. or Immig.	754	565.58	89.73	300	980	300	783	0.936	22.71
8	No Disability	52226	659.26	53.64	330	990	330	865	0.913	15.87
	Disability	4903	575.76	69.80	330	990	330	763	0.909	21.11
	No IEP	52223	659.27	53.63	330	990	330	865	0.912	15.87
	IEP	4901	575.66	69.79	330	990	330	763	0.908	21.11
	No Accommodation	51240	659.01	54.23	330	990	330	865	0.914	15.94
	Accommodation	5815	591.12	72.42	330	990	330	854	0.923	20.09
	Am. Indian/AK	712	636.31	60.19	330	990	330	772	0.917	17.29
	Asian/Pac. Isl.	2102	664.57	61.92	330	990	330	827	0.930	16.38
	Black	3424	629.54	61.17	330	990	330	795	0.918	17.47
	Hispanic	15647	622.74	60.57	330	990	330	813	0.915	17.71
	White	35244	666.89	53.57	330	990	330	865	0.912	15.90
	Free Lunch Elig.	16950	620.41	60.90	330	990	330	805	0.914	17.88
	Reduced Lunch Elig.	4547	640.49	55.85	330	990	330	795	0.909	16.84
	Not FRL Elig.	35611	668.68	53.16	330	990	330	865	0.912	15.80
	Female	27991	661.39	56.03	330	990	330	865	0.920	15.90
	Male	29133	643.16	62.22	330	990	330	825	0.927	16.82
	Lang. Prof. NA	48137	659.72	56.25	330	990	330	865	0.918	16.14
	Lang. Prof. NEP	665	517.78	71.55	330	990	330	702	0.835	29.07
	Lang. Prof. LEP	3543	582.95	50.59	330	990	330	732	0.843	20.03
	Lang. Prof. FEP	4782	645.21	42.59	330	990	330	811	0.867	15.56
	Not Mig. or Immig.	56370	653.06	59.13	330	990	330	865	0.923	16.39
	Mig. or Immig.	753	580.05	75.46	330	990	330	770	0.920	21.35

**Table 224. Subgroup Reliability for the CSAP Reading Tests (Continued)**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min	Max	ALPHA	SEM
9	No Disability	54072	666.97	48.24	350	995	350	895	0.925	13.22
	Disability	4978	598.25	58.06	350	995	350	770	0.921	16.34
	No IEP	54058	666.97	48.25	350	995	350	895	0.925	13.22
	IEP	4977	598.23	58.03	350	995	350	770	0.921	16.34
	No Accommodation	55644	664.85	49.82	350	995	350	895	0.929	13.31
	Accommodation	3311	599.27	61.23	350	995	350	793	0.927	16.49
	Am. Indian/AK	693	645.53	51.38	350	995	350	771	0.930	13.63
	Asian/Pac. Isl.	2242	670.89	57.58	350	995	350	819	0.944	13.64
	Black	3606	638.85	53.89	350	995	350	809	0.930	14.23
	Hispanic	15885	635.09	51.96	350	995	350	834	0.926	14.11
	White	36626	674.38	47.37	350	995	350	895	0.922	13.19
	Free Lunch Elig.	16015	632.63	53.11	350	995	350	834	0.927	14.36
	Reduced Lunch Elig.	4313	651.67	48.26	350	995	350	824	0.922	13.52
	Not FRL Elig.	38698	674.06	47.95	350	995	350	895	0.925	13.12
	Female	28712	670.18	50.21	350	995	350	895	0.931	13.24
	Male	30341	652.66	53.62	350	995	350	861	0.936	13.55
	Lang. Prof. NA	50285	667.66	49.84	350	995	350	895	0.928	13.36
	Lang. Prof. NEP	919	553.81	58.38	350	995	350	742	0.848	22.75
	Lang. Prof. LEP	3028	601.52	39.75	350	995	350	751	0.861	14.82
	Lang. Prof. FEP	4813	651.47	39.25	350	995	350	834	0.890	13.01
	Not Mig. or Immig.	58223	662.10	52.01	350	995	350	895	0.933	13.46
	Mig. or Immig.	811	594.80	60.95	350	995	350	787	0.930	16.16
10	No Disability	50992	686.38	53.72	370	999	370	902	0.922	15.04
	Disability	4234	611.07	68.17	370	999	370	822	0.915	19.82
	No IEP	50990	686.38	53.72	370	999	370	902	0.922	15.04
	IEP	4231	611.04	68.19	370	999	370	822	0.916	19.82
	No Accommodation	52119	684.29	55.64	370	999	370	902	0.925	15.26
	Accommodation	3001	616.45	69.09	370	999	370	822	0.924	19.00
	Am. Indian/AK	679	665.45	58.41	370	999	370	817	0.923	16.16
	Asian/Pac. Isl.	2028	689.69	63.55	370	999	370	871	0.940	15.58
	Black	3322	656.63	59.54	370	999	370	812	0.924	16.46
	Hispanic	14188	653.79	57.03	370	999	370	834	0.917	16.47
	White	35018	693.51	54.06	370	999	370	902	0.922	15.09
	Free Lunch Elig.	13525	649.81	58.67	370	999	370	841	0.918	16.76
	Reduced Lunch Elig.	3610	670.11	54.07	370	999	370	841	0.915	15.75
	Not FRL Elig.	38082	692.54	54.53	370	999	370	902	0.923	15.10
	Female	27114	690.54	53.69	370	999	370	902	0.925	14.74
	Male	28120	671.02	61.27	370	999	370	861	0.933	15.88
	Lang. Prof. NA	47506	686.84	55.87	370	999	370	902	0.925	15.29
	Lang. Prof. NEP	772	562.30	66.54	370	999	370	744	0.823	28.02
	Lang. Prof. LEP	2329	618.06	49.37	370	999	370	762	0.847	19.33
	Lang. Prof. FEP	4619	667.77	44.34	370	999	370	828	0.884	15.11
	Not Mig. or Immig.	54468	681.55	57.74	370	999	370	902	0.929	15.41
	Mig. or Immig.	752	612.36	71.58	370	999	370	780	0.926	19.44

**Table 225. Subgroup Reliability for the CSAP Writing Tests**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min	Max	ALPHA	SEM
3	No Disability	55392	470.32	47.89	150	680	150	680	0.897	15.37
	Disability	5378	413.85	53.30	150	680	150	617	0.903	16.61
	No IEP	55393	470.32	47.89	150	680	150	680	0.897	15.37
	IEP	5375	413.82	53.29	150	680	150	617	0.903	16.61
	No Accommodation	49913	474.97	46.33	150	680	150	680	0.889	15.43
	Accommodation	10803	420.73	47.72	150	680	150	638	0.893	15.62
	Am. Indian/AK	715	449.48	47.96	150	680	150	680	0.900	15.17
	Asian/Pac. Isl.	2438	477.55	54.98	150	680	150	680	0.923	15.29
	Black	3616	445.66	52.41	150	680	150	680	0.917	15.09
	Hispanic	17614	444.45	47.95	150	680	150	680	0.905	14.77
	White	36387	476.87	48.06	150	680	150	680	0.895	15.60
	Free Lunch Elig.	20663	442.47	47.86	150	680	150	680	0.905	14.79
	Reduced Lunch Elig.	4963	458.55	46.50	150	680	150	618	0.897	14.94
	Not FRL Elig.	35125	479.73	48.18	150	680	150	680	0.895	15.62
	Female	29946	473.61	49.46	150	680	150	680	0.902	15.50
	Male	30824	457.27	51.14	150	680	150	680	0.912	15.16
	Lang. Prof. NA	49797	471.17	49.40	150	680	150	680	0.903	15.42
	Lang. Prof. NEP	2268	389.82	52.75	150	680	150	556	0.881	18.16
	Lang. Prof. LEP	7326	444.52	35.98	150	680	150	617	0.852	13.84
	Lang. Prof. FEP	1379	488.95	38.63	150	680	295	680	0.831	15.89
	Not Mig. or Immig.	59816	465.88	50.60	150	680	150	680	0.908	15.32
	Mig. or Immig.	950	430.10	61.52	150	680	150	617	0.929	16.40
4	No Disability	55369	490.97	49.23	190	730	190	730	0.898	15.73
	Disability	5721	431.93	47.88	190	730	190	660	0.885	16.20
	No IEP	55370	490.97	49.23	190	730	190	730	0.898	15.73
	IEP	5719	431.90	47.87	190	730	190	660	0.885	16.20
	No Accommodation	48799	495.48	48.05	190	730	190	730	0.892	15.78
	Accommodation	12263	445.51	47.92	190	730	190	730	0.890	15.90
	Am. Indian/AK	688	466.41	50.25	190	730	308	657	0.907	15.31
	Asian/Pac. Isl.	2355	498.81	54.25	190	730	293	730	0.914	15.90
	Black	3708	467.52	48.60	190	730	208	712	0.902	15.19
	Hispanic	18483	461.71	47.25	190	730	190	730	0.895	15.30
	White	35861	499.01	49.49	190	730	190	730	0.897	15.88
	Free Lunch Elig.	21031	459.91	46.80	190	730	190	698	0.894	15.23
	Reduced Lunch Elig.	5232	477.22	45.76	190	730	263	712	0.887	15.37
	Not FRL Elig.	34806	502.11	49.30	190	730	190	730	0.896	15.90
	Female	29936	494.25	51.97	190	730	190	730	0.905	16.02
	Male	31159	476.98	50.67	190	730	190	730	0.910	15.20
	Lang. Prof. NA	49609	492.62	50.29	190	730	190	730	0.902	15.74
	Lang. Prof. NEP	2043	402.33	41.64	190	730	190	534	0.818	17.77
	Lang. Prof. LEP	7055	454.01	34.89	190	730	294	645	0.830	14.37
	Lang. Prof. FEP	2384	500.37	39.13	190	730	332	730	0.823	16.47
	Not Mig. or Immig.	60251	486.07	51.68	190	730	190	730	0.908	15.67
	Mig. or Immig.	834	439.83	56.59	190	730	190	617	0.916	16.39

**Table 225. Subgroup Reliability for the CSAP Writing Tests (Continued)**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min	Max	ALPHA	SEM
5	No Disability	53780	513.45	52.03	220	780	220	780	0.902	16.32
	Disability	5944	448.26	49.94	220	780	220	670	0.888	16.74
	No IEP	53781	513.45	52.03	220	780	220	780	0.902	16.31
	IEP	5942	448.21	49.90	220	780	220	670	0.887	16.74
	No Accommodation	48801	517.31	50.64	220	780	222	780	0.896	16.31
	Accommodation	10910	460.69	51.92	220	780	220	724	0.895	16.83
	Am. Indian/AK	680	481.65	53.66	220	780	322	680	0.911	15.97
	Asian/Pac. Isl.	2234	524.07	62.43	220	780	220	780	0.928	16.80
	Black	3650	488.20	53.61	220	780	220	678	0.913	15.81
	Hispanic	17767	484.07	51.01	220	780	220	780	0.902	15.95
	White	35394	519.79	52.70	220	780	220	780	0.903	16.37
	Free Lunch Elig.	20064	480.40	50.63	220	780	220	733	0.901	15.90
	Reduced Lunch Elig.	5027	497.89	49.22	220	780	226	733	0.898	15.75
	Not FRL Elig.	34619	523.68	52.46	220	780	220	780	0.902	16.46
	Female	29267	516.64	54.12	220	780	220	780	0.907	16.49
	Male	30459	497.65	54.98	220	780	220	780	0.916	15.93
	Lang. Prof. NA	49070	513.43	53.75	220	780	220	780	0.909	16.25
	Lang. Prof. NEP	1209	408.74	53.81	220	780	220	652	0.854	20.57
	Lang. Prof. LEP	5941	467.86	37.08	220	780	316	659	0.841	14.80
	Lang. Prof. FEP	3504	516.55	43.47	220	780	324	780	0.857	16.45
6	Not Mig. or Immig.	58935	507.63	54.95	220	780	220	780	0.913	16.23
	Mig. or Immig.	785	456.52	63.88	220	780	220	724	0.918	18.32
	No Disability	53202	530.69	57.99	230	840	230	840	0.901	18.27
	Disability	5652	455.88	53.21	230	840	230	724	0.883	18.20
	No IEP	53198	530.69	57.99	230	840	230	840	0.901	18.27
	IEP	5651	455.85	53.22	230	840	230	724	0.883	18.21
	No Accommodation	50032	532.93	57.23	230	840	230	840	0.899	18.23
	Accommodation	8730	469.35	58.00	230	840	230	840	0.897	18.61
	Am. Indian/AK	712	499.83	60.24	230	840	266	734	0.914	17.65
	Asian/Pac. Isl.	2263	543.09	67.02	230	840	230	840	0.920	18.93
	Black	3619	501.63	58.83	230	840	239	811	0.910	17.69
	Hispanic	16970	496.58	54.88	230	840	230	801	0.900	17.40
	White	35292	537.91	59.40	230	840	230	840	0.905	18.28
	Free Lunch Elig.	19023	492.71	55.01	230	840	230	739	0.899	17.45
	Reduced Lunch Elig.	4923	511.68	53.62	230	840	234	840	0.896	17.32
	Not FRL Elig.	34886	541.99	58.90	230	840	230	840	0.902	18.44
	Female	28974	534.43	60.13	230	840	230	840	0.907	18.36
	Male	29879	512.90	61.21	230	840	230	840	0.916	17.73
	Lang. Prof. NA	48628	530.65	60.07	230	840	230	840	0.909	18.12
	Lang. Prof. NEP	927	411.35	62.59	230	840	230	591	0.870	22.53
	Lang. Prof. LEP	5103	472.45	39.42	230	840	294	657	0.827	16.40
	Lang. Prof. FEP	4197	527.53	46.23	230	840	346	783	0.850	17.88
	Not Mig. or Immig.	58073	524.34	61.00	230	840	230	840	0.912	18.07
	Mig. or Immig.	775	461.17	75.07	230	840	230	696	0.925	20.53

**Table 225. Subgroup Reliability for the CSAP Writing Tests (Continued)**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min	Max	ALPHA	SEM
7	No Disability	52438	560.23	66.17	240	890	240	890	0.902	20.77
	Disability	5334	473.07	60.69	240	890	240	751	0.874	21.56
	No IEP	52432	560.24	66.17	240	890	240	890	0.901	20.77
	IEP	5332	473.04	60.70	240	890	240	751	0.874	21.56
	No Accommodation	50734	561.28	65.60	240	890	240	890	0.900	20.71
	Accommodation	6961	485.83	68.42	240	890	240	846	0.896	22.04
	Am. Indian/AK	687	529.67	70.86	240	890	240	788	0.909	21.38
	Asian/Pac. Isl.	2236	575.16	77.10	240	890	240	853	0.925	21.16
	Black	3320	526.36	67.42	240	890	240	836	0.906	20.64
	Hispanic	16232	518.06	63.60	240	890	240	850	0.897	20.37
	White	35297	569.29	66.39	240	890	240	890	0.903	20.66
	Free Lunch Elig.	17726	514.48	63.77	240	890	240	850	0.897	20.46
	Reduced Lunch Elig.	4646	538.68	60.72	240	890	263	783	0.892	19.96
	Not FRL Elig.	35377	572.88	66.31	240	890	240	890	0.902	20.77
	Female	28281	566.42	68.47	240	890	240	890	0.907	20.89
	Male	29490	538.54	69.44	240	890	240	872	0.914	20.34
	Lang. Prof. NA	48151	560.98	67.80	240	890	240	890	0.907	20.63
	Lang. Prof. NEP	775	408.85	67.07	240	890	240	607	0.823	28.25
	Lang. Prof. LEP	4197	482.71	44.02	240	890	309	692	0.804	19.49
	Lang. Prof. FEP	4649	547.69	53.02	240	890	240	842	0.855	20.21
8	Not Mig. or Immig.	57002	553.19	69.59	240	890	240	890	0.912	20.64
	Mig. or Immig.	759	477.56	86.09	240	890	240	846	0.923	23.86
	No Disability	52195	572.67	67.35	250	910	250	910	0.904	20.92
	Disability	4907	481.84	58.98	250	910	250	780	0.866	21.57
	No IEP	52192	572.68	67.34	250	910	250	910	0.903	20.92
	IEP	4905	481.76	58.93	250	910	250	780	0.866	21.57
	No Accommodation	50982	573.18	66.72	250	910	250	910	0.902	20.84
	Accommodation	6042	494.89	70.87	250	910	250	910	0.897	22.73
	Am. Indian/AK	714	542.23	67.34	250	910	250	836	0.907	20.50
	Asian/Pac. Isl.	2094	587.90	80.43	250	910	250	910	0.928	21.55
	Black	3424	538.17	65.97	250	910	250	910	0.902	20.63
	Hispanic	15668	530.74	64.68	250	910	250	910	0.897	20.80
	White	35202	581.74	67.71	250	910	250	910	0.906	20.81
	Free Lunch Elig.	16977	526.78	63.89	250	910	250	834	0.895	20.67
	Reduced Lunch Elig.	4545	549.86	61.96	250	910	271	836	0.893	20.24
	Not FRL Elig.	35559	584.99	67.86	250	910	250	910	0.905	20.94
	Female	27996	580.38	69.72	250	910	250	910	0.909	21.00
	Male	29101	549.95	69.72	250	910	250	910	0.913	20.53
	Lang. Prof. NA	48094	573.55	68.85	250	910	250	910	0.909	20.73
	Lang. Prof. NEP	670	416.42	68.42	250	910	250	660	0.822	28.90
	Lang. Prof. LEP	3553	489.04	44.69	250	910	330	677	0.796	20.16
	Lang. Prof. FEP	4783	554.66	52.64	250	910	342	910	0.847	20.61
	Not Mig. or Immig.	56339	566.00	70.46	250	910	250	910	0.913	20.81
	Mig. or Immig.	757	480.93	86.20	250	910	250	910	0.914	25.33

**Table 225. Subgroup Reliability for the CSAP Writing Tests (Continued)**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min	Max	ALPHA	SEM
9	No Disability	54102	569.76	75.20	260	930	260	930	0.905	23.21
	Disability	4990	471.00	64.45	260	930	260	745	0.861	24.07
	No IEP	54087	569.77	75.19	260	930	260	930	0.905	23.21
	IEP	4989	470.94	64.37	260	930	260	745	0.860	24.07
	No Accommodation	55159	567.60	75.97	260	930	260	930	0.907	23.17
	Accommodation	3768	471.06	71.41	260	930	260	762	0.875	25.20
	Am. Indian/AK	692	532.03	72.20	260	930	292	893	0.899	23.00
	Asian/Pac. Isl.	2247	577.56	90.39	260	930	260	930	0.927	24.36
	Black	3608	527.52	72.60	260	930	260	848	0.900	23.00
	Hispanic	15900	523.15	69.32	260	930	260	930	0.892	22.83
	White	36647	580.91	75.94	260	930	260	930	0.907	23.20
	Free Lunch Elig.	16035	518.93	68.59	260	930	260	868	0.890	22.73
	Reduced Lunch Elig.	4321	545.32	68.48	260	930	260	881	0.893	22.42
	Not FRL Elig.	38711	580.84	77.19	260	930	260	930	0.909	23.29
	Female	28734	578.89	77.12	260	930	260	930	0.908	23.34
	Male	30361	544.88	77.68	260	930	260	930	0.914	22.84
	Lang. Prof. NA	50324	570.58	76.97	260	930	260	930	0.910	23.10
	Lang. Prof. NEP	925	410.13	68.95	260	930	260	669	0.790	31.59
	Lang. Prof. LEP	3025	482.23	47.38	260	930	260	681	0.776	22.42
	Lang. Prof. FEP	4813	544.45	57.80	260	930	260	930	0.852	22.25
	Not Mig. or Immig.	58263	562.78	78.30	260	930	260	930	0.913	23.16
	Mig. or Immig.	812	464.79	87.66	260	930	260	804	0.898	27.94
10	No Disability	50957	583.27	84.22	270	950	270	950	0.920	23.84
	Disability	4257	476.15	69.81	270	950	270	784	0.899	22.23
	No IEP	50955	583.27	84.22	270	950	270	950	0.920	23.84
	IEP	4254	476.11	69.84	270	950	270	784	0.899	22.24
	No Accommodation	51882	580.96	85.10	270	950	270	950	0.922	23.70
	Accommodation	3165	477.72	76.61	270	950	270	853	0.906	23.46
	Am. Indian/AK	682	546.42	79.85	270	950	270	865	0.922	22.30
	Asian/Pac. Isl.	2021	593.73	100.40	270	950	270	950	0.935	25.56
	Black	3314	540.13	79.96	270	950	270	926	0.920	22.57
	Hispanic	14184	531.31	74.85	270	950	270	950	0.911	22.32
	White	35022	595.49	85.32	270	950	270	950	0.925	23.42
	Free Lunch Elig.	13531	525.34	75.12	270	950	270	899	0.913	22.14
	Reduced Lunch Elig.	3618	556.62	76.44	270	950	270	950	0.915	22.32
	Not FRL Elig.	38056	594.42	85.91	270	950	270	950	0.924	23.68
	Female	27098	592.77	86.25	270	950	270	950	0.921	24.22
	Male	28124	557.90	86.20	270	950	270	950	0.930	22.73
	Lang. Prof. NA	47502	584.79	85.95	270	950	270	950	0.926	23.43
	Lang. Prof. NEP	773	417.84	69.07	270	950	270	758	0.818	29.43
	Lang. Prof. LEP	2328	482.85	49.67	270	950	270	717	0.829	20.54
	Lang. Prof. FEP	4611	547.12	65.81	270	950	270	950	0.882	22.62
	Not Mig. or Immig.	54459	576.35	87.22	270	950	270	950	0.928	23.48
	Mig. or Immig.	749	478.04	88.28	270	950	270	797	0.915	25.73

**Table 226. Subgroup Reliability for the CSAP Science Tests**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min	Max	ALPHA	SEM
5	No Disability	54065	505.22	59.37	300	900	300	900	0.915	17.27
	Disability	5977	439.63	66.32	300	900	300	654	0.913	19.53
	No IEP	54073	505.22	59.37	300	900	300	900	0.915	17.27
	IEP	5969	439.53	66.31	300	900	300	654	0.913	19.54
	No Accommodation	51337	508.95	57.65	300	900	300	900	0.911	17.16
	Accommodation	8669	437.93	60.63	300	900	300	660	0.897	19.49
	Am. Indian/AK	686	474.31	61.53	300	900	300	692	0.912	18.28
	Asian/Pac. Isl.	2246	510.40	65.69	300	900	300	704	0.929	17.49
	Black	3647	464.11	63.67	300	900	300	735	0.915	18.57
	Hispanic	17814	464.94	58.64	300	900	300	686	0.904	18.18
	White	35650	518.83	56.02	300	900	300	900	0.907	17.07
	Free Lunch Elig.	20113	463.34	59.25	300	900	300	718	0.905	18.30
	Reduced Lunch Elig.	5048	487.70	56.68	300	900	300	681	0.904	17.55
	Not FRL Elig.	34867	520.68	56.30	300	900	300	900	0.908	17.03
	Female	29432	496.61	61.31	300	900	300	764	0.919	17.43
	Male	30609	500.70	64.95	300	900	300	900	0.926	17.62
	Lang. Prof. NA	49360	508.27	59.85	300	900	300	900	0.916	17.31
	Lang. Prof. NEP	1224	384.51	56.31	300	900	300	593	0.859	21.12
	Lang. Prof. LEP	5957	442.86	45.41	300	900	300	600	0.836	18.39
	Lang. Prof. FEP	3502	498.57	47.74	300	900	300	704	0.876	16.84
8	Not Mig. or Immig.	59247	499.51	62.72	300	900	300	900	0.922	17.52
	Mig. or Immig.	791	437.77	71.00	300	900	300	638	0.922	19.81
	No Disability	52551	504.77	56.68	300	900	300	713	0.921	15.89
	Disability	4926	431.27	64.00	300	900	300	635	0.890	21.18
	No IEP	52547	504.77	56.68	300	900	300	713	0.921	15.89
	IEP	4925	431.24	63.99	300	900	300	635	0.890	21.18
	No Accommodation	52465	504.93	56.40	300	900	300	713	0.921	15.85
	Accommodation	4936	429.81	64.84	300	900	300	678	0.893	21.19
	Am. Indian/AK	716	479.26	62.81	300	900	300	642	0.917	18.12
	Asian/Pac. Isl.	2114	513.95	62.17	300	900	300	681	0.931	16.29
	Black	3433	466.73	60.28	300	900	300	655	0.902	18.86
	Hispanic	15676	465.30	59.75	300	900	300	649	0.902	18.73
	White	35537	515.63	53.57	300	900	300	713	0.917	15.40
	Free Lunch Elig.	17017	463.32	60.20	300	900	300	657	0.901	18.94
	Reduced Lunch Elig.	4553	487.16	55.22	300	900	300	640	0.904	17.12
	Not FRL Elig.	35884	516.57	53.91	300	900	300	713	0.918	15.41
	Female	28166	497.54	57.98	300	900	300	702	0.920	16.35
	Male	29307	499.36	63.61	300	900	300	713	0.930	16.78
	Lang. Prof. NA	48488	506.48	57.37	300	900	300	713	0.922	16.02
	Lang. Prof. NEP	665	375.20	58.40	300	900	300	570	0.800	26.14
	Lang. Prof. LEP	3549	426.51	49.40	300	900	300	617	0.797	22.28
	Lang. Prof. FEP	4773	487.81	47.28	300	900	300	706	0.889	15.73
	Not Mig. or Immig.	56711	499.34	60.34	300	900	300	713	0.925	16.51
	Mig. or Immig.	760	433.96	69.23	300	900	300	619	0.904	21.45



**Table 226. Subgroup Reliability for the CSAP Science Tests (Concluded)**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min	Max	ALPHA	SEM
10	No Disability	51269	500.80	59.75	300	900	300	714	0.915	17.39
	Disability	4282	422.59	70.32	300	900	300	631	0.900	22.28
	No IEP	51267	500.80	59.75	300	900	300	714	0.915	17.39
	IEP	4277	422.57	70.33	300	900	300	631	0.900	22.27
	No Accommodation	52383	499.22	60.78	300	900	300	714	0.917	17.55
	Accommodation	3043	417.51	70.79	300	900	300	629	0.902	22.21
	Am. Indian/AK	687	474.62	64.83	300	900	300	609	0.912	19.28
	Asian/Pac. Isl.	2035	504.11	68.69	300	900	300	661	0.930	18.20
	Black	3343	462.37	64.57	300	900	300	625	0.900	20.39
	Hispanic	14226	458.54	62.62	300	900	300	714	0.897	20.08
	White	35265	512.31	56.54	300	900	300	714	0.910	16.97
	Free Lunch Elig.	13588	456.19	64.66	300	900	300	658	0.900	20.40
	Reduced Lunch Elig.	3618	482.77	58.28	300	900	300	638	0.899	18.48
	Not FRL Elig.	38336	509.59	58.26	300	900	300	714	0.914	17.12
	Female	27242	493.95	60.23	300	900	300	661	0.912	17.85
	Male	28312	495.56	67.64	300	900	300	714	0.928	18.11
	Lang. Prof. NA	47814	502.73	60.25	300	900	300	714	0.916	17.48
	Lang. Prof. NEP	782	362.68	54.84	300	900	300	577	0.777	25.91
	Lang. Prof. LEP	2332	416.54	53.97	300	900	300	561	0.815	23.20
	Lang. Prof. FEP	4619	474.27	52.58	300	900	300	654	0.881	18.12
	Not Mig. or Immig.	54790	495.83	63.34	300	900	300	714	0.920	17.91
	Mig. or Immig.	754	418.20	72.87	300	900	300	609	0.904	22.54

**Table 227. Subgroup Reliability for the CSAP Spanish Reading Tests**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min	Max	ALPHA	SEM
3	No Disability	1120	524.18	47.78	300	740	300	708	0.882	16.44
	Disability	90	458.64	71.22	300	740	300	573	0.876	25.07
	No IEP	1120	524.18	47.78	300	740	300	708	0.882	16.44
	IEP	90	458.64	71.22	300	740	300	573	0.876	25.07
	No Accommodation	922	522.12	49.83	300	740	300	664	0.884	17.00
	Accommodation	288	510.29	60.37	300	740	300	708	0.906	18.49
	Am. Indian/AK	1	541.00	.	300	740	541	541	.	.
	Asian/Pac. Isl.	.	.	.	300	740	.	.	.	.
	Black	3	447.33	134.30	300	740	300	563	.	.
	Hispanic	1186	519.27	52.64	300	740	300	708	0.891	17.39
	White	20	531.00	36.16	300	740	477	623	.	.
	Free Lunch Elig.	1021	519.34	52.45	300	740	300	708	0.891	17.35
	Reduced Lunch Elig.	83	537.46	40.34	300	740	447	643	0.848	15.74
	Not FRL Elig.	106	504.74	59.70	300	740	300	622	0.895	19.38
	Female	574	527.35	49.18	300	740	300	708	0.881	16.93
	Male	636	512.04	54.80	300	740	300	643	0.894	17.86
	Lang. Prof. NA	11	516.09	52.60	300	740	414	589	0.924	14.46
	Lang. Prof. NEP	695	502.66	52.94	300	740	300	708	0.874	18.78
	Lang. Prof. LEP	499	541.73	42.70	300	740	300	636	0.860	15.97
	Lang. Prof. FEP	5	602.60	33.10	300	740	568	643	.	.
4	Not Mig. or Immig.	1093	518.86	51.81	300	740	300	708	0.890	17.21
	Mig. or Immig.	117	523.44	60.92	300	740	300	664	0.900	19.28
	No Disability	112	532.28	41.24	300	790	369	635	0.916	11.92
	Disability	1	525.00	.	300	790	525	525	.	.
	No IEP	112	532.28	41.24	300	790	369	635	0.916	11.92
	IEP	1	525.00	.	300	790	525	525	.	.
	No Accommodation	71	534.14	42.07	300	790	.	635	0.913	12.42
	Accommodation	42	528.95	39.56	300	790	405	612	0.920	11.20
	Am. Indian/AK	1	551.00	.	300	790	551	551	.	.
	Asian/Pac. Isl.	.	.	.	300	790	.	.	.	.
	Black	.	.	.	300	790	.	.	.	.
	Hispanic	107	531.14	41.69	300	790	369	635	0.917	12.00
	White	5	551.40	23.88	300	790	525	585	.	.
	Free Lunch Elig.	82	532.78	43.29	300	790	369	635	0.925	11.89
	Reduced Lunch Elig.	7	537.00	31.04	300	790	490	568	.	.
	Not FRL Elig.	24	528.88	36.57	300	790	458	585	0.885	12.41
	Female	56	530.45	42.93	300	790	369	612	0.916	12.42
	Male	57	533.95	39.43	300	790	432	635	0.917	11.33
	Lang. Prof. NA	1	635.00	.	300	790	635	635	.	.
	Lang. Prof. NEP	99	530.55	41.67	300	790	369	612	0.917	12.00
	Lang. Prof. LEP	13	537.00	25.03	300	790	490	580	.	.
	Lang. Prof. FEP				300	790				
	Not Mig. or Immig.	57	530.67	39.51	300	790	405	635	0.914	11.56
	Mig. or Immig.	56	533.79	42.87	300	790	369	612	0.919	12.24

**Table 228. Subgroup Reliability for the CSAP Spanish Writing Tests**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min	Max	ALPHA	SEM
3	No Disability	1122	513.35	70.40	250	750	250	750	0.907	21.49
	Disability	89	435.67	83.61	250	750	250	662	0.923	23.15
	No IEP	1122	513.35	70.40	250	750	250	750	0.907	21.49
	IEP	89	435.67	83.61	250	750	250	662	0.923	23.15
	No Accommodation	907	513.99	71.47	250	750	250	750	0.910	21.48
	Accommodation	304	488.70	79.11	250	750	250	708	0.926	21.52
	Am. Indian/AK	1	497.00	.	250	750	497	497	.	.
	Asian/Pac. Isl.				250	750				
	Black	2	488.50	17.68	250	750	476	501	.	.
	Hispanic	1188	507.63	74.53	250	750	250	750	0.918	21.39
	White	20	510.40	62.96	250	750	418	630	.	.
	Free Lunch Elig.	1016	509.76	73.30	250	750	250	750	0.915	21.39
	Reduced Lunch El	86	525.67	65.28	250	750	339	675	0.899	20.72
	Not FRL Elig.	109	473.63	80.17	250	750	250	643	0.926	21.87
	Female	579	523.48	71.12	250	750	250	750	0.909	21.44
	Male	632	493.13	74.12	250	750	250	663	0.917	21.39
	Lang. Prof. NA	10	490.20	84.43	250	750	401	697	.	.
	Lang. Prof. NEP	700	481.75	69.89	250	750	250	708	0.905	21.53
	Lang. Prof. LEP	496	543.50	63.87	250	750	250	750	0.891	21.06
	Lang. Prof. FEP	5	610.00	46.33	250	750	559	676	.	.
4	Not Mig. or Immig.	1096	507.82	74.11	250	750	250	750	0.916	21.42
	Mig. or Immig.	115	505.91	75.81	250	750	261	676	0.921	21.29
	No Disability	112	514.80	38.02	300	790	351	611	0.860	14.22
	Disability	1	506.00	.	300	790	506	506	.	.
	No IEP	112	514.80	38.02	300	790	351	611	0.860	14.22
	IEP	1	506.00	.	300	790	506	506	.	.
	No Accommodation	68	514.93	36.26	300	790	408	585	0.849	14.10
	Accommodation	45	514.42	40.57	300	790	351	611	0.875	14.36
	Am. Indian/AK	1	486.00	.	300	790	486	486	.	.
	Asian/Pac. Isl.				300	790				
	Black				300	790				
	Hispanic	107	514.19	38.36	300	790	351	611	0.860	14.33
	White	5	532.00	23.58	300	790	506	563	.	.
	Free Lunch Elig.	82	516.56	39.14	300	790	351	611	0.871	14.08
	Reduced Lunch El	7	512.57	22.47	300	790	474	547	.	.
	Not FRL Elig.	24	509.08	37.49	300	790	408	563	.	.
	Female	56	517.43	41.59	300	790	351	611	0.879	14.48
	Male	57	512.07	33.96	300	790	430	585	0.839	13.61
	Lang. Prof. NA	1	585.00	.	300	790	585	585	.	.
	Lang. Prof. NEP	99	512.17	38.79	300	790	351	611	0.865	14.25
	Lang. Prof. LEP	13	528.77	20.31	300	790	501	570	.	.
	Lang. Prof. FEP				300	790				
	Not Mig. or Immig.	57	515.91	40.50	300	790	351	593	0.866	14.80
	Mig. or Immig.	56	513.52	35.30	300	790	415	611	.	.

**Table 229. Scale Scores by Accommodation and Disability Classification**

Content	Grade	Disability Classification	Accommodation					
			No Accommodation			Accommodation		
			N	Mean	Std	N	Mean	Std
<b>R E A D I N G</b>	3	No Disability	48704	571.12	67.47	6811	495.42	87.63
		Disability	1905	498.86	110.35	3463	432.50	114.24
		No IEP	48702	571.12	67.48	6810	495.44	87.63
		IEP	1904	498.81	110.24	3463	432.50	114.24
	4	No Disability	47781	599.18	46.74	7596	552.64	60.81
		Disability	1708	541.47	81.99	3996	495.46	93.98
		No IEP	47782	599.18	46.74	7596	552.66	60.78
		IEP	1706	541.42	82.00	3996	495.42	94.00
	5	No Disability	47937	627.58	53.92	5897	571.98	66.39
		Disability	1810	560.49	83.89	4144	514.33	86.48
		No IEP	47940	627.58	53.92	5895	572.00	66.36
		IEP	1806	560.37	83.90	4146	514.32	86.49
	6	No Disability	48379	642.77	54.85	4791	587.08	70.22
		Disability	1842	568.02	80.95	3802	531.54	82.82
		No IEP	48375	642.77	54.85	4791	587.07	70.22
		IEP	1841	567.96	80.96	3802	531.55	82.82
	7	No Disability	49333	652.46	53.89	3092	597.23	72.44
		Disability	2092	579.12	74.11	3248	548.15	77.37
		No IEP	49326	652.47	53.88	3093	597.24	72.43
		IEP	2091	579.06	74.15	3247	548.13	77.38
	8	No Disability	49241	661.91	51.58	2985	615.43	66.53
		Disability	2074	589.74	67.80	2829	565.51	69.48
		No IEP	49239	661.93	51.56	2984	615.45	66.54
		IEP	2070	589.58	67.79	2831	565.48	69.48
	9	No Disability	52901	668.12	47.27	1171	614.69	61.04
		Disability	2839	603.85	56.17	2139	590.83	59.69
		No IEP	52886	668.13	47.28	1172	614.78	61.09
		IEP	2840	603.83	56.14	2137	590.78	59.65
	10	No Disability	49916	687.58	52.77	1076	630.80	66.33
		Disability	2309	613.28	67.13	1925	608.43	69.33
		No IEP	49912	687.57	52.77	1078	630.87	66.29
		IEP	2308	613.27	67.15	1923	608.36	69.33

**Table 229. Scale Scores by Accommodation and Disability Classification (Continued)**

Content	Grade	Disability Classification	Accommodation					
			No Accommodation			Accommodation		
			N	Mean	Std	N	Mean	Std
<b>W R I T I N G</b>	3	No Disability	48379	476.03	45.70	7013	430.89	43.90
		Disability	1588	442.28	52.80	3790	401.93	48.81
		No IEP	48379	476.04	45.70	7014	430.89	43.89
		IEP	1586	442.26	52.81	3789	401.92	48.81
	4	No Disability	47481	496.56	47.61	7888	457.33	45.29
		Disability	1347	457.05	48.03	4374	424.19	45.10
		No IEP	47482	496.56	47.60	7888	457.33	45.29
		IEP	1345	456.97	48.05	4374	424.19	45.09
	5	No Disability	47344	518.72	49.91	6436	474.66	50.90
		Disability	1476	471.54	52.64	4468	440.56	46.52
		No IEP	47347	518.72	49.91	6434	474.66	50.91
		IEP	1471	471.45	52.62	4471	440.57	46.51
	6	No Disability	48520	534.88	56.16	4682	487.25	58.83
		Disability	1604	474.16	57.64	4048	448.64	49.52
		No IEP	48516	534.88	56.16	4682	487.24	58.83
		IEP	1603	474.04	57.71	4048	448.65	49.53
	7	No Disability	49333	652.46	53.89	3092	597.23	72.44
		Disability	2092	579.12	74.11	3248	548.15	77.37
		No IEP	49104	563.75	64.28	3328	508.43	71.67
		IEP	1699	489.97	62.78	3633	465.13	58.04
	8	No Disability	49246	575.90	65.36	2949	518.69	76.53
		Disability	1815	498.25	59.76	3092	472.21	56.34
		No IEP	49243	575.92	65.35	2949	518.69	76.53
		IEP	1812	498.07	59.70	3093	472.20	56.33
	9	No Disability	52787	571.84	73.77	1315	486.09	83.88
		Disability	2538	478.70	65.57	2452	463.02	62.29
		No IEP	52771	571.86	73.76	1316	486.24	84.02
		IEP	2539	478.65	65.54	2450	462.94	62.15
	10	No Disability	49751	585.52	82.89	1206	490.54	86.56
		Disability	2298	481.54	70.38	1959	469.83	68.62
		No IEP	49747	585.52	82.89	1208	490.66	86.54
		IEP	2297	481.53	70.45	1957	469.74	68.59

**Table 229. Scale Scores by Accommodation and Disability Classification (Continued)**

Content	Grade	Disability Classification	Accommodation					
			No Accommodation			Accommodation		
			N	Mean	Std	N	Mean	Std
<b>M A T H E M A T I C S</b>	3	No Disability	49329	486.10	85.15	7232	401.68	75.60
		Disability	1671	439.22	95.21	3812	363.71	84.00
		No IEP	49333	486.09	85.15	7232	401.68	75.60
		IEP	1666	439.22	95.27	3812	363.71	84.00
	4	No Disability	49102	508.98	70.53	6408	441.02	69.53
		Disability	1521	461.32	80.22	4224	395.57	77.97
		No IEP	49102	508.98	70.54	6408	441.06	69.57
		IEP	1517	461.21	80.22	4224	395.52	77.89
	5	No Disability	48540	534.41	64.22	5346	473.18	64.60
		Disability	1621	478.89	74.21	4355	429.37	69.04
		No IEP	48546	534.41	64.22	5345	473.18	64.61
		IEP	1611	478.71	74.24	4357	429.38	69.03
	6	No Disability	49497	550.57	65.88	3747	487.71	72.28
		Disability	1877	479.71	81.58	3780	437.13	77.86
		No IEP	49495	550.57	65.88	3748	487.70	72.27
		IEP	1875	479.65	81.64	3779	437.13	77.87
	7	No Disability	49452	563.66	67.00	3031	509.36	75.91
		Disability	1827	488.18	78.61	3524	452.34	76.75
		No IEP	49444	563.66	67.01	3030	509.41	75.90
		IEP	1828	488.19	78.60	3524	452.35	76.76
	8	No Disability	49321	585.74	63.79	2956	540.39	78.20
		Disability	1851	511.12	75.04	3062	475.22	78.48
		No IEP	49322	585.74	63.79	2955	540.41	78.20
		IEP	1847	510.98	74.99	3060	475.22	78.50
	9	No Disability	52828	587.36	65.14	1320	528.07	77.57
		Disability	2529	502.78	78.07	2461	484.60	76.23
		No IEP	52811	587.36	65.15	1321	528.12	77.56
		IEP	2531	502.79	78.05	2459	484.56	76.23
	10	No Disability	50010	596.70	66.70	1144	526.45	79.73
		Disability	2335	506.61	75.15	1920	489.14	76.68
		No IEP	50007	596.70	66.70	1144	526.49	79.74
		IEP	2333	506.61	75.20	1920	489.11	76.66

**Table 229. Scale Scores by Accommodation and Disability Classification (Continued)**

Content	Grade	Disability Classification	Accommodation					
			No Accommodation			Accommodation		
			N	Mean	Std	N	Mean	Std
<b>S C I E N C E</b>	5	No Disability	49606	510.42	56.75	4459	447.45	57.14
		Disability	1768	467.70	66.58	4209	427.85	62.58
		No IEP	49615	510.41	56.75	4458	447.43	57.14
		IEP	1758	467.48	66.64	4211	427.86	62.58
	8	No Disability	50467	507.18	54.95	2084	446.40	66.07
		No IEP	50463	507.18	54.94	2084	446.40	66.07
		IEP	2073	449.88	63.11	2852	417.69	61.16
		Disability	2074	449.95	63.12	2852	417.69	61.16
	10	No Disability	50147	502.48	58.37	1122	425.85	71.55
		Disability	2361	430.68	69.63	1921	412.65	69.90
		No IEP	50143	502.48	58.37	1124	426.01	71.59
		IEP	2358	430.73	69.67	1919	412.54	69.85

Content	Grade	Disability Classification	Accommodation					
			No Accommodation			Accommodation		
			N	Mean	Std	N	Mean	Std
<b>S R P E A A N D I I S N H G</b>	3	No Disability	897	523.71	48.29	223	526.08	45.70
		Disability	25	465.20	68.90	65	456.12	72.45
		No IEP	897	523.71	48.29	223	526.08	45.70
		IEP	25	465.20	68.90	65	456.12	72.45
	4	No Disability	70	534.27	42.36	42	528.95	39.56
		Disability	1	525.00	.	.	.	.
		No IEP	70	534.27	42.36	42	528.95	39.56
		IEP	1	525.00	.	.	.	.
<b>S W P R A I N T I I S N H G</b>	3	No Disability	889	515.22	70.71	233	506.20	68.90
		Disability	18	453.11	83.70	71	431.25	83.60
		No IEP	889	515.22	70.71	233	506.20	68.90
		IEP	18	453.11	83.70	71	431.25	83.60
	4	No Disability	67	515.06	36.52	45	514.42	40.57
		Disability	1	506.00	.	.	.	.
		No IEP	67	515.06	36.52	45	514.42	40.57
		IEP	1	506.00	.	.	.	.

**Table 230. Overall Estimates of Standard Error of Measurement**

<b>ContentArea</b>	<b>Grade</b>	<b>Standard Error Of Measurement</b>
Reading	3	26.66
Reading	4	15.48
Reading	5	18.19
Reading	6	17.93
Reading	7	18.02
Reading	8	17.06
Reading	9	14.26
Reading	10	15.82
Spanish Reading	3	17.96
Spanish Reading	4	12.03
Writing	3	15.47
Writing	4	15.99
Writing	5	16.55
Writing	6	18.52
Writing	7	20.99
Writing	8	21.13
Writing	9	23.46
Writing	10	24.75
Spanish Writing	3	21.77
Spanish Writing	4	14.67
Mathematics	3	27.89
Mathematics	4	19.31
Mathematics	5	17.37
Mathematics	6	19.45
Mathematics	7	19.59
Mathematics	8	18.95
Mathematics	9	18.94
Mathematics	10	20.54
Science	5	17.61
Science	8	16.48
Science	10	18.35



**Table 231. Reading Scale Scores and Associated Standard Errors**

RD 3		RD 4		RD 5		RD 6		RD 7		RD 8		RD 9		RD 10	
SS	SE	SS	SE	SS	SE	SS	SE	SS	SE	SS	SE	SS	SE	SS	SE
150	253														
175	228	180	209												
200	203	200	189	220	175										
225	178	225	164	225	170										
250	153	250	139	250	149	260	164								
275	128	275	115	275	130	275	150								
300	105	300	95	300	112	300	128	300	118						
325	84	325	79	325	96	325	108	325	100	330	114				
350	67	350	64	350	82	350	91	350	85	350	99	350	133	370	123
375	54	375	52	375	68	375	74	375	71	375	82	375	109	375	119
400	42	400	42	400	55	400	59	400	59	400	68	400	89	400	97
425	34	425	33	425	44	425	46	425	48	425	55	425	72	425	78
450	27	450	26	450	33	450	35	450	37	450	45	450	57	450	63
475	23	475	20	475	25	475	27	475	29	475	36	475	44	475	49
500	19	500	15	500	20	500	22	500	23	500	29	500	32	500	38
525	17	525	12	525	16	525	18	525	19	525	23	525	22	525	29
550	17	550	11	550	14	550	16	550	16	550	18	550	15	550	22
575	18	575	11	575	13	575	14	575	15	575	16	575	13	575	18
600	20	600	11	600	13	600	13	600	14	600	14	600	11	600	15
625	22	625	12	625	14	625	13	625	14	625	13	625	11	625	13
650	26	650	14	650	15	650	14	650	14	650	13	650	11	650	12
675	31	675	17	675	17	675	15	675	15	675	14	675	12	675	12
700	36	700	20	700	19	700	16	700	17	700	15	700	13	700	12
725	42	725	25	725	21	725	19	725	19	725	16	725	15	725	13
750	50	750	30	750	24	750	22	750	21	750	18	750	17	750	15
775	59	775	37	775	28	775	27	775	25	775	22	775	20	775	17
795	67	800	45	800	33	800	32	800	30	800	26	800	25	800	21
		825	55	825	39	825	39	825	36	825	32	825	32	825	25
		850	67	850	46	850	47	850	43	850	39	850	40	850	31
		875	82	875	54	875	55	875	50	875	47	875	50	875	38
		900	100	900	63	900	65	900	59	900	57	900	61	900	47
		925	122	925	74	925	77	925	69	925	69	925	75	925	58
		940	137	950	87	950	91	950	80	950	83	950	92	950	70
				955	89	970	103	975	93	975	98	975	112	975	85
								980	95	990	109	995	130	999	101

**Table 232. Writing Scale Scores and Associated Standard Errors**

WR 3		WR 4		WR 5		WR 6		WR 7		WR 8		WR 9		WR 10	
SS	SE	SS	SE	SS	SE	SS	SE	SS	SE	SS	SE	SS	SE	SS	SE
150	107														
175	82	190	65												
200	61	200	60	220	51										
225	45	225	47	225	49	230	50	240	46						
250	34	250	37	250	39	250	42	250	43	250	49	260	44	270	44
275	26	275	30	275	32	275	34	275	36	275	40	275	40	275	43
300	21	300	25	300	27	300	29	300	31	300	34	300	34	300	37
325	18	325	22	325	23	325	25	325	28	325	29	325	30	325	32
350	16	350	18	350	21	350	23	350	26	350	26	350	27	350	29
375	14	375	16	375	18	375	21	375	24	375	24	375	26	375	26
400	13	400	14	400	16	400	19	400	23	400	23	400	24	400	23
425	12	425	13	425	14	425	17	425	22	425	21	425	23	425	20
450	12	450	12	450	13	450	15	450	19	450	19	450	21	450	18
475	14	475	13	475	13	475	14	475	17	475	18	475	20	475	16
500	19	500	14	500	14	500	14	500	16	500	17	500	19	500	17
525	24	525	17	525	16	525	15	525	17	525	17	525	18	525	18
550	29	550	20	550	18	550	18	550	18	550	18	550	18	550	20
575	33	575	24	575	21	575	21	575	19	575	19	575	19	575	22
600	37	600	29	600	25	600	23	600	21	600	20	600	21	600	25
625	45	625	35	625	29	625	27	625	23	625	22	625	23	625	27
650	56	650	42	650	34	650	30	650	26	650	24	650	25	650	30
675	74	675	51	675	40	675	35	675	30	675	26	675	29	675	33
680	79	700	62	700	49	700	42	700	34	700	30	700	33	700	36
		725	75	725	59	725	50	725	39	725	35	725	38	725	40
		730	78	750	73	750	60	750	45	750	42	750	44	750	45
				775	91	775	72	775	52	775	50	775	50	775	50
				780	94	800	86	800	60	800	59	800	58	800	56
						825	101	825	69	825	70	825	66	825	63
						840	112	850	80	850	83	850	75	850	71
								875	93	875	98	875	86	875	80
								890	102	900	115	900	98	900	90
										910	124	925	113	925	102
												930	116	950	116

**Table 233. Spanish Reading and Writing Scale Scores and Associated Standard Errors**

SP RD 3		SP RD 4			Sp WR 3		SP WR 4	
SS	SE	SS	SE		SS	SE	SS	SE
					250	64		
					275	50		
300	128	300	101		300	39	300	62
325	103	325	80		325	30	325	47
350	78	350	62		350	24	350	36
375	56	375	48		375	20	375	28
400	39	400	35		400	18	400	22
425	26	425	25		425	17	425	19
450	17	450	18		450	17	450	17
475	13	475	13		475	17	475	15
500	12	500	10		500	18	500	13
525	12	525	9		525	20	525	11
550	14	550	9		550	22	550	11
575	16	575	10		575	24	575	12
600	19	600	12		600	26	600	15
625	24	625	15		625	29	625	20
650	32	650	22		650	33	650	26
675	42	675	30		675	40	675	32
700	55	700	38		700	50	700	41
725	69	725	48		725	64	725	51
740	79	750	58		750	81	750	63
		775	69				775	78
		790	76				790	88

**Table 234. Mathematics Scale Scores and Associated Standard Errors**

MA 3		MA 4		MA 5		MA 6		MA 7		MA 8		MA 9		MA 10	
SS	SE	SS	SE	SS	SE	SS	SE	SS	SE	SS	SE	SS	SE	SS	SE
150	69														
175	60	180	51												
200	52	200	45	220	64										
225	46	225	39	225	61	240	62								
250	40	250	34	250	51	250	59								
275	36	275	30	275	43	275	51	280	95						
300	32	300	26	300	36	300	45	300	81	310	78				
325	29	325	23	325	30	325	39	325	65	325	71	340	97		
350	26	350	21	350	25	350	34	350	52	350	60	350	88	370	82
375	24	375	19	375	22	375	30	375	42	375	50	375	69	375	78
400	23	400	17	400	19	400	26	400	34	400	42	400	55	400	62
425	22	425	16	425	17	425	23	425	29	425	35	425	44	425	51
450	22	450	15	450	16	450	20	450	25	450	30	450	36	450	41
475	23	475	15	475	15	475	18	475	22	475	26	475	29	475	34
500	24	500	15	500	14	500	16	500	19	500	22	500	24	500	29
525	26	525	16	525	14	525	15	525	16	525	18	525	21	525	23
550	29	550	18	550	14	550	14	550	14	550	16	550	17	550	19
575	32	575	20	575	15	575	14	575	13	575	14	575	15	575	16
600	37	600	23	600	17	600	15	600	13	600	13	600	13	600	14
625	43	625	28	625	20	625	17	625	13	625	12	625	12	625	13
650	50	650	34	650	26	650	20	650	14	650	13	650	11	650	12
675	59	675	41	675	33	675	24	675	17	675	15	675	11	675	11
700	70	700	50	700	41	700	30	700	21	700	18	700	12	700	12
		725	60	725	51	725	37	725	26	725	22	725	15	725	15
		750	73	750	63	750	47	750	33	750	26	750	20	750	19
		775	87	775	77	775	58	775	42	775	32	775	27	775	24
		780	91	800	93	800	70	800	52	800	39	800	36	800	30
						825	84	825	64	825	47	825	47	825	36
						830	87	850	78	850	56	850	60	850	44
								860	84	875	66	875	76	875	53
										890	73	900	95	900	64
												920	113	925	78
														950	95

**Table 235. Science Scale Scores and Associated Standard Errors**

SC 5		SC 8		SC 10	
SS	SE	SS	SE	SS	SE
300	38	300	58	300	53
325	31	325	46	325	43
350	25	350	37	350	34
375	21	375	29	375	27
400	18	400	23	400	22
425	16	425	19	425	19
450	15	450	16	450	17
475	15	475	14	475	15
500	15	500	13	500	14
525	15	525	12	525	13
550	16	550	12	550	13
575	17	575	13	575	13
600	19	600	14	600	15
625	22	625	17	625	17
650	26	650	20	650	20
675	30	675	24	675	23
700	36	700	28	700	28
725	44	725	34	725	33
750	54	750	41	750	38
775	65	775	49	775	45
800	79	800	58	800	53
825	95	825	69	825	62
850	114	850	81	850	74
875	136	875	94	875	88
900	161	900	109	900	105

**Table 236. Cut Scores for the 2010 CSAP Tests**

<b>Language</b>	<b>Content Area</b>	<b>Grade</b>	<b>Unsatisfactory</b>	<b>Partially Proficient</b>	<b>Proficient</b>	<b>Advanced</b>
English	Reading	3	150-465	466-525	526-655	656-795
English	Reading	4	180-516	517-571	572-670	671-940
English	Reading	5	220-537	538-587	588-690	691-955
English	Reading	6	260-542	543-599	600-695	696-970
English	Reading	7	300-566	567-619	620-715	716-980
English	Reading	8	330-577	578-631	632-723	724-990
English	Reading	9	350-584	585-641	642-738	739-995
English	Reading	10	370-606	607-662	663-746	747-999
Spanish	Reading	3	300-481	482-512	513-575	576-740
Spanish	Reading	4	300-505	506-536	537-591	592-790
English	Writing	3	150-392	393-464	465-532	533-680
English	Writing	4	190-413	414-484	485-553	554-730
English	Writing	5	220-417	418-497	498-575	576-780
English	Writing	6	230-422	423-512	513-599	600-840
English	Writing	7	240-429	430-538	539-628	629-890
English	Writing	8	250-433	434-555	556-650	651-910
English	Writing	9	260-435	436-562	563-671	672-930
English	Writing	10	270-458	459-577	578-689	690-950
Spanish	Writing	3	250-447	448-498	499-574	575-750
Spanish	Writing	4	300-495	496-531	532-595	596-790
English	Mathematics	3	150-334	335-418	419-509	510-700
English	Mathematics	4	180-382	383-454	455-537	538-780
English	Mathematics	5	220-421	422-493	494-561	562-800
English	Mathematics	6	240-453	454-519	520-588	589-830
English	Mathematics	7	280-486	487-558	559-613	614-860
English	Mathematics	8	310-520	521-576	577-627	628-890
English	Mathematics	9	340-547	548-601	602-651	652-920
English	Mathematics	10	370-561	562-626	627-691	692-950
English	Science	5	300-428	429-507	508-568	569-900
English	Science	8	300-458	459-506	507-578	579-900
English	Science	10	300-468	469-506	507-580	581-900

**Table 237. Alignment Summary, Reading and Writing**

Grade	Score Reporting Category (SRC)	No items in SRC	Number of PI	Number of PI Assessed	% of PI Assessed
3	1	40	7	6	86%
	2	21	5	2	40%
	3	32	5	5	100%
4	1	29	8	7	88%
	2	21	5	4	80%
	3	32	5	5	100%
	4	15	5	5	100%
	5	13	6	4	67%
	6	13	4	3	75%
5	1	25	7	6	86%
	2	21	7	6	86%
	3	32	5	5	100%
	4	15	5	4	80%
	5	17	7	4	57%
	6	13	4	3	75%
6	1	27	7	6	86%
	2	21	7	6	86%
	3	32	5	5	100%
	4	12	5	5	100%
	5	19	7	6	86%
	6	12	4	3	75%
7	1	21	9	7	78%
	2	21	8	6	75%
	3	32	6	5	83%
	4	17	5	4	80%
	5	17	7	4	57%
	6	15	4	4	100%
8	1	23	7	4	57%
	2	21	7	6	86%
	3	32	6	5	83%
	4	17	5	5	100%
	5	15	6	4	67%
	6	14*	4	3	75%
9	1	21*	7	7	100%
	2	21	8	6	75%
	3	32	6	4	67%
	4	16	5	5	100%
	5	19	6	6	100%
	6	12*	5	4	80%
10	1	22	7	6	86%
	2	21	8	7	88%
	3	32	5	4	80%
	4	16	6	2	33%
	5	19	6	5	83%
	6	13	4	3	75%

\*Content area in which item(s) were removed from calibration. Counts shown in this table do not include removed items.

**Table 238. Alignment Summary, Mathematics**

Grade	Score Reporting Category (SRC)	No items in SRC	Number of PI	Number of PI Assessed	% of PI Assessed
3	1	8	13	8	62%
	2/3	11	10	9	90%
	4/5	14	15	12	80%
	6	7	9	5	56%
4	1	14	11	10	91%
	2	9	6	6	100%
	3	11	6	6	100%
	4/5	21	15	13	87%
	6	14	10	7	70%
5	1	16	13	12	92%
	2	11	7	6	86%
	3	11	15	9	60%
	4/5	15	22	13	59%
	6	16	12	7	58%
6	1	13	8	7	88%
	2	10	6	6	100%
	3	10	9	8	89%
	4/5	16	17	15	88%
	6	11	8	6	75%
7	1/6	19	18	11	61%
	2	12	5	5	100%
	3	12	9	8	89%
	4/5	17	14	13	93%
8	1/6	15	10	8	80%
	2	15	6	6	100%
	3	12	9	6	67%
	4/5	18	11	11	100%
9	1/6	13	9	7	78%
	2	17	12	11	92%
	3	15	14	12	86%
	4/5	15	9	8	89%
10	1/6	13	10	9	90%
	2	17	14	12	86%
	3	14*	22	13	59%
	4/5	14*	17	12	71%

\* Content area in which item(s) were removed from calibration. Count shown in this table does not include removed items.



**Table 239. Alignment Summary, Science**

Grade	Score Reporting Category (SRC)	No items in SRC	Number of PI	Number of PI Assessed	% of PI Assessed
5	1/5	30	11	11	100%
	2	15	16	13	81%
	3	15	13	11	85%
	4	15	13	11	85%
8	1/5	32	22	15	68%
	2	18	27	14	52%
	3	17	24	14	58%
	4	16	24	14	58%
10	1/5	33	24	20	83%
	2	15*	14	11	79%
	3	17	28	17	61%
	4	17	19	14	74%

\* Content area in which item(s) were removed from calibration. Count shown in this table does not include removed items.

**Table 240. Alignment Summary, Spanish Reading and Writing**

Grade	Score Reporting Category (SRC)	No items in SRC	Number of PI	Number of PI Assessed	% of PI Assessed
3	1	40	7	5	71%
	2	21	4	1	25%
	3	32	5	5	100%
4	1	31	8	6	75%
	2	19	5	4	80%
	3	34	5	4	80%
	4	14	5	5	100%
	5	13	6	3	50%
	6	12	4	3	75%

**Table 241. Items Flagged for DIF by Ethnicity Focal Group**

Content Area	Grade	Item #	Item Type	Ethnicity Focal Group <sup>1</sup>											
				Am. Indian/ AK Native			Asian/Pacific Islander			Black			Hispanic		
				Flag	N	Obs- Prd	Flag	N	Obs- Prd	Flag	N	Obs- Prd	Flag	N	Obs- Prd
Mathe- matics	3	5	CR	*	698	-0.101				+	3673	0.104			
	4	63	CR							*	3668	-0.117			
	4	69	CR				+	2210	0.106						
	5	46	CR							*	3625	-0.167			
	8	27	MC										*	15236	-0.108
	9	55	CR				+	2000	0.109						
	10	27	CR				*	1844	-0.155						
Reading	4	23	CR				+	2207	0.121						
	4	109	CR				+	2207	0.110						
	5	99	CR				+	2181	0.161						
	6	29	CR				+	2164	0.141						
	6	111	CR				+	2164	0.181						
	7	14	CR				+	2057	0.120						
	7	95	CR				*	2057	-0.101						
	8	28	CR				+	2104	0.136				+	15229	0.108
	8	29	CR							+	3386	0.101			
	8	96	CR				*	2104	-0.103						
	8	112	MC							*	3386	-0.103			
	9	5	CR							+	3659	0.127			
	9	9	MC				*	2004	-0.112						
	9	13	CR				+	2004	0.132						
	9	15	CR										+	15935	0.105
	9	25	CR							*	3659	-0.119			
	9	43	CR				+	2004	0.114						
	9	45	CR				+	2004	0.242						
	9	100	CR				+	2004	0.103						
		10	10	CR										+	13998
	10	45	CR				+	1835	0.112						
	10	95	CR				+	1835	0.116						
	10	106	CR				+	1835	0.110						
Science	8	22	CR	*	627	-0.109	+	2106	0.148				+	15224	0.163
	8	76	CR				+	2106	0.103						
	10	22	CR				+	1841	0.220				+	14014	0.160
	10	23	CR				+	1841	0.113	+	3445	0.157			
Writing	3	6	MC										*	17308	-0.105
	4	51	CR							+	3616	0.124	+	17616	0.111
	5	3A	CR												
	7	2D	CR				*	2053	-0.147						
	7	89	MC										*	15807	-0.107
	7	92	CR										+	15807	0.100
	8	79	MC				*	2104	-0.100						
	9	2D	CR				*	2002	-0.125						
	9	55	MC				*	2002	-0.171						
	9	56	MC				+	2002	0.175						
	9	96	CR				+	2002	0.117						
	9	116	CR				+	2002	0.114						
	10	94	CR				+	1833	0.108						

1. DIF is not reported for N less than 100. Flag + = favoring and \* = disfavoring

**Table 242. Items Flagged for DIF by Gender Focal Group**

Content Area	Grade	Item #	Item Type	Gender Focal Group <sup>1</sup>					
				Female			Male		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd
Mathematics	7	60	CR	+	28083	0.111			
	8	28	CR	+	27801	0.102			
	9	40	CR	+	28785	0.144	*	30255	-0.117
Reading	8	111	CR	+	27790	0.112	*	29292	-0.108
	9	28	CR	+	28733	0.111			
	9	43	CR				*	30187	-0.108
	10	10	CR	+	27237	0.123			
Science	8	22	CR	+	27779	0.119			
Writing	6	79	CR	+	28124	0.122	*	29242	-0.122
	7	60	CR				*	29291	-0.107
	8	22	CR	+	27791	0.116	*	29292	-0.118
	8	88	CR				*	29292	-0.104
	9	96	CR	+	28728	0.120	*	30193	-0.124
	10	74	CR	+	27271	0.115	*	28502	-0.136

1. DIF is not reported for N less than 100. Flag + = favoring and \* = disfavoring

Table 243. Items Flagged for DIF by Accommodations Focal Group

				Accommodations Focal Group <sup>1</sup>														
				Extended Timing			Oral Script			Scribe			Teacher Read Directions			Other <sup>2</sup>		
Content	Grade	Item #	Item Type	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
M A T H E M A T I C S	3	1	MC							*	217	-0.14						
		4	CR							+	217	0.168						
		18	MC							*	217	-0.127						
		19	MC													+	698	0.124
		20	CR							+	217	0.228						
		26	CR				+	6719	0.17	+	217	0.231						
		39	MC													*	698	-0.153
		40	CR							+	217	0.112						
	4	1	MC							*	223	-0.136				*	170	-0.109
		4	MC							*	223	-0.136						
		5	CR				+	6136	0.111	+	223	0.125						
		7	MC													*	170	-0.111
		8	MC							*	223	-0.107						
		15	CR													*	170	-0.395
		18	CR				+	6136	0.116							+	170	0.298
		19	MC													*	170	-0.115
		30	CR													+	170	0.162
		33	CR							+	223	0.189						
		46	CR							+	223	0.279						
		49	CR				*	6136	-0.119							*	170	-0.145
		57	MC							*	223	-0.122						
		66	MC							*	223	-0.101						
	5	3	MC							*	217	-0.131						
		10	CR													*	144	-0.153
		12	MC													*	144	-0.143
		13	MC													*	144	-0.113
		17	CR				*	5437	-0.17							*	144	-0.189
		18	MC													+	144	0.115
		23	CR							+	217	0.282						
		26	MC													+	144	0.104
		34	MC													+	144	0.148
		35	CR				+	5437	0.166	+	217	0.154				+	144	0.251
		41	MC													*	144	-0.129

<sup>1</sup> DIF is not reported for N less than 100. Flag +=favoring and \*=disfavoring focal group.<sup>2</sup> Other includes use of manipulatives, signing, assistive comm..device, appr. nonstandard accomm., translated oral script, word-to-word dictionary, Brailleversion, and large-print version.

Table 243. Items Flagged for DIF by Accommodations Focal Group (continued)

				Accommodations Focal Group <sup>1</sup>															
				Extended Timing			Oral Script			Scribe			Teacher Read			Other <sup>2</sup>			
													Directions						
Content	Grade	Item	Item	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-	
		#	Type			Prd			Prd			Prd			Prd				Prd
M A T H E M A T I C S	5	43	MC													+	144	0.131	
		46	CR													*	144	-0.159	
		60	CR							+	217	0.197							
		63	MC													*	144	-0.117	
		69	CR				+	5437	0.115										
	6	2	MC														+	194	0.102
		6	MC							*	158	-0.112							
		13	CR														+	194	0.124
		23	CR										+	1354	0.101				
		34	MC													*	194	-0.113	
		37	CR							+	158	0.217							
		53	MC													+	194	0.115	
		60	CR													*	194	-0.199	
	7	8	MC														*	195	-0.112
		11	CR	*	2547	-0.117							*	1124	-0.116	*	195	-0.221	
		20	CR				+	2429	0.108								*	195	-0.176
		29	CR					*	2429	-0.133							*	195	-0.164
		33	CR														+	195	0.247
		35	CR																
		37	MC							*	118	-0.124							
		48	MC														+	195	0.102
		55	CR							*	118	-0.18					+	195	0.201
		60	CR							*	118	-0.385							
	8	4	CR				*	2134	-0.162	*	95	-0.305					*	157	-0.178
		8	CR				*	2134	-0.103								*	157	-0.156
		10	MC							*	95	-0.154					+	157	0.148
		24	CR							+	95	0.197					+	157	0.14
		27	MC														+	157	0.145
		28	MC														+	157	0.198
		34	CR										*	944	-0.105				
		40	CR										+	944	0.102	+	157	0.189	
		44	CR				*	2134	-0.13								*	157	-0.207
		46	MC														*	157	-0.141

Table 243. Items Flagged for DIF by Accommodations Focal Group (continued)

				Accommodations Focal Group <sup>1</sup>														
				Extended Timing			Oral Script			Scribe			Teacher Read			Other <sup>2</sup>		
													Directions					
Content	Grade	Item	Item	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-
		#	Type			Prd			Prd			Prd			Prd			Prd
M A T H E M A T I C S	8	48	CR													*	157	-0.225
		51	CR													+	157	0.115
		54	MC													*	157	-0.123
		59	MC													+	157	0.103
		60	CR													+	157	0.171
	9	30	MC													+	269	0.147
		35	CR								*	560	-0.106	*	269	-0.151		
		38	MC							*	75	-0.147						
		44	MC							+	75	0.207						
		54	CR											*	269	-0.123		
	10	1	MC													+	237	0.115
		2	MC							+	67	0.111						
		4	CR							*	67	-0.272						
		19	MC													*	237	-0.131
		30	MC													+	237	0.141
		31	MC							+	67	0.144						
		37	MC													+	237	0.115
		48	CR													*	237	-0.169
		52	CR													+	237	0.136
R E A D I N G	3	1	CR							*	279	-0.104						
		6	CR												*	63	-0.185	
		14	CR							+	279	0.171						
		26	CR							+	279	0.201						
	4	26	MC													*	61	-0.174
		6	MC													*	61	-0.174
		11	CR													*	61	-0.267
		31	MC													*	61	-0.267
		39	CR													+	61	0.114
		19	MC													+	61	0.114
		51	MC							+	315	0.139						
		100	MC							+	315	0.166						
		105	MC							+	315	0.186						
		116	CR													*	61	-0.106

Table 243. Items Flagged for DIF by Accommodations Focal Group (continued)

				Accommodations Focal Group <sup>1</sup>															
				Extended Timing			Oral Script			Scribe			Teacher Read			Other <sup>2</sup>			
													Directions						
Content	Grade	Item	Item	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-	
		#	Type			Prd			Prd			Prd			Prd			Prd	
R E A D I N G	5	96	CR							*	262	-0.106							
		5	MC							*	262	-0.106							
		97	MC							*	262	-0.173							
		6	CR							*	262	-0.173							
		114	MC							+	262	0.143							
		23	CR							+	262	0.143							
		33	MC													+	56	0.164	
	48	CR								+	262	0.129							
	6	11	CR							*	206	-0.188							
		35	MC							*	206	-0.188							
		97	MC							+	206	0.103							
	7	98	MC							*	161	-0.118							
		101	MC							+	161	0.121							
		102	MC							+	161	0.102							
	8	100	MC							+	123	0.102							
		102	MC							+	123	0.141							
		104	CR							+	123	0.118							
	9	16	MC							*	95	-0.151							
		38	MC							*	95	-0.151							
		45	MC							*	95	-0.129							
		23	MC							*	95	-0.129							
		102	MC							*	95	-0.126							
	10	105	MC											*	707	-0.12			
		13	MC											*	707	-0.12			
		47	CR	+	2110	0.146								+	707	0.19			
S C I E N C E	5	5	MC													+	167	0.103	
		9	MC													+	167	0.161	
		16	MC													+	167	0.201	
		23	CR													*	167	-0.162	
		24	CR					*	5422	-0.151									
		26	MC													+	167	0.135	
		28	MC							*	229	-0.125							
		29	CR							+	229	0.142					*	167	-0.141

Table 243. Items Flagged for DIF by Accommodations Focal Group (continued)


<div></div>				Accommodations Focal Group <sup>1</sup>															
				Extended Timing			Oral Script			Scribe			Teacher Read			Other <sup>2</sup>			
													Directions						
Content	Grade	Item	Item	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-	
		#	Type			Prd			Prd			Prd			Prd			Prd	
S C I E N C E		34	CR													+	167	0.143	
		38	MC													*	167	-0.146	
		50	MC													+	167	0.14	
		55	CR				*	5422	-0.156										
		63	MC				+	5422	0.126							+	167	0.113	
		65	MC							*	229	-0.121							
		69	MC													+	167	0.12	
	8	3	MC													+	174	0.149	
		6	MC							*	98	-0.133				*	174	-0.102	
		14	CR							+	98	0.139							
		15	MC													+	174	0.149	
		24	CR				*	2128	-0.129	*	98	-0.429				*			
		28	MC							*	98	-0.118				*	174	-0.104	
		37	CR													*	174	-0.179	
		39	MC													*	174	-0.106	
		51	MC							+	98	0.139							
		54	MC													+	174	0.104	
		74	MC													+	174	0.139	
		78	MC							+	98	0.127							
	10	21	CR				*	856	-0.118										
		31	MC							*	75	-0.149							
		63	MC													+	257	0.105	
		65	CR													*	257	-0.211	
		77	CR				+	856	0.114										
	W R I T I N G	3	1A	CR							*	282	-0.167						
			1B	CR												*	74	-0.131	
1C			CR				*	6265	-0.107	*	282	-0.172				*	74	-0.196	
5			MC							*	282	-0.107							
9			MC							*	282	-0.103							
13D			CR							+	282	0.115							
15			MC							*	282	-0.103							
19			MC				+	6265	0.116							+	74	0.18	
20	MC				+	6265	0.109												



Table 243. Items Flagged for DIF by Accommodations Focal Group (continued)

				Accommodations Focal Group <sup>1</sup>															
				Extended Timing			Oral Script			Scribe			Teacher Read			Other <sup>2</sup>			
													Directions						
Content	Grade	Item	Item	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-	
		#	Type			Prd			Prd			Prd			Prd			Prd	Prd
W R I T I N G	3	28	MC							*	282	-0.108							
		30D	CR							+	282	0.181							
		37	MC													+	74	0.152	
		39D	CR							+	282	0.209							
	4	2A	CR								*	293	-0.14						
		2C	CR								*	293	-0.112						
		2D	CR														*	118	-0.114
		3A	CR								+	293	0.269						
		3B	CR				*	5562	-0.113	+	293	0.286							
		3C	CR							+	293	0.134							
		53	MC							+	293	0.218					+	118	0.26
		62	MC														+	118	0.114
		23	CR														+	118	0.114
		63	MC														*	118	-0.112
		71	MC								*	293	-0.101						
		72	MC														*	118	-0.141
		76	MC								*	293	-0.106						
		80	MC														+	118	0.156
		81	MC														+	118	0.151
		82	MC														+	118	0.104
		83	MC								*	293	-0.11						
		90	MC					+	5562	0.19									
	5	1	CR								*	256	-0.109				*	134	-0.111
		2A	CR																
		2B	CR														*	134	-0.117
		2D	CR														+	134	0.142
		2F	CR				*	4985	-0.128	*	256	-0.144							
		3C	CR							+	256	0.118							
		53	MC							+	256	0.108					+	134	0.319
		69	MC														*	134	-0.116
		77	MC							+	256	0.103							
		78	MC							+	256	0.127							
		79	MC					+	4985	0.12									

Table 243. Items Flagged for DIF by Accommodations Focal Group (continued)

				Accommodations Focal Group <sup>1</sup>														
				Extended Timing			Oral Script			Scribe			Teacher Read			Other <sup>2</sup>		
													Directions					
Content	Grade	Item	Item	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-
		#	Type			Prd			Prd			Prd			Prd			Prd
W R I T I N G	5	91	MC							+	256	0.13				+	134	0.16
		94	CR							*	200	-0.155						
	6	2D	CR							*	200	-0.155						
		3C	CR							+	200	0.11						
		51	MC	+	3722	0.121	+	2968	0.188	+	200	0.287	+	1395	0.183	+	174	0.252
		52	MC							*	200	-0.132						
		54	MC													*	174	-0.161
		61	MC													*	174	-0.101
		70	MC													+	174	0.137
		86	MC													+	174	0.124
		87	MC							+	200	0.131						
		90	MC													+	174	0.101
	7	2A	CR													*	179	-0.11
		2B	CR													*	179	-0.194
		56	MC													*	179	-0.11
		47	CR													*	179	-0.11
		57	MC							*	166	-0.102						
		58	MC							*	166	-0.1						
		62	MC													+	179	0.118
		69	MC										+	1199	0.113			
		70	MC							+	166	0.121				+	179	0.118
		72	MC													*	179	-0.113
		75	MC													+	179	0.122
		81	MC					+	2201	0.109								
		83	MC													+	179	0.173
		88	MC													*	179	-0.114
	8	89	CR							+	166	0.111						
		2B	CR													*	166	-0.107
		2F	CR													+	166	0.13
		51	MC	+	2621	0.123	+	1903	0.135				+	1012	0.114			
		63	MC													+	166	0.117
		72	MC													+	166	0.149
		73	MC													*	166	-0.223

Table 243. Items Flagged for DIF by Accommodations Focal Group (continued)

				Accommodations Focal Group <sup>1</sup>															
				Extended Timing			Oral Script			Scribe			Teacher Read			Other <sup>2</sup>			
													Directions						
Content	Grade	Item	Item	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-	Flag	N	Obs-	
		#	Type			Prd			Prd			Prd			Prd			Prd	
W R I T I N G	8	75	MC	+	2621	0.127							+	1012	0.115				
		76	MC													*	166	-0.114	
		80	MC													+	166	0.101	
		86	MC													+	166	0.115	
	9	2D	CR														+	238	0.161
		2F	CR							*	110	-0.103					+	238	0.112
		3C	CR													*	238	-0.115	
		47	MC					+	947	0.135							+	238	0.153
		51	MC														+	238	0.139
		52	MC													*	238	-0.186	
		54	MC													*	238	-0.105	
		56	MC													+	238	0.114	
		59	MC													+	238	0.175	
		66	MC								+	110	0.123						
		69	MC														+	238	0.222
		82	MC														+	238	0.128
	10	2A	CR					*	743	-0.152							*	235	-0.264
		2B	CR					*	743	-0.126	*	85	-0.151				+	235	0.155
		2C	CR														*	235	-0.105
		2F	CR														*	235	-0.117
		72	CR											+	467	0.142			
		73	MC														*	235	-0.117
		85	MC					+	743	0.111									
		88	MC														*	235	-0.251
		93	MC														+	235	0.106
		94	MC														+	235	0.104
		95	CR					+	743	0.119				+	467	0.16	+	235	0.197

**Table 244. Items Flagged for DIF by Primary Disability**

				Primary Disability State Focal Group														
				Emotional			Specific Learning Disability			Physical			Speech/Language			Other		
Content	Grade	Item #	Item Type	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
M A T H E M A T I C S	3	4	CR	*	338	-0.106												
		20	CR				+	2302	0.118									
		26	CR				+	2302	0.158									
	4	5	CR				+	2785	0.114									
		15	CR							*	699	-0.125				*	364	-0.138
		28	CR	*	430	-0.108												
		39	MC													+	364	0.111
		46	CR													+	364	0.16
		49	CR	*	430	-0.102	*	2785	-0.139	*	699	-0.103				*	364	-0.113
		55	CR	+	430	0.106												
	5	10	CR	*	470	-0.268				*	699	-0.147				*	376	-0.104
		17	CR	*	470	-0.147	*	3249	-0.169							*	376	-0.143
		33	CR	*	470	-0.132												
		35	CR				+	3249	0.13									
		46	CR	*	470	-0.182												
		49	CR	+	470	0.119												
		54	CR	*	470	-0.108												
	6	69	CR				+	3249	0.105	+	699	0.145						
		7	CR	*	491	-0.241				*	770	-0.114				*	343	-0.202
		33	CR							*	770	-0.118				*	343	-0.159
		37	CR	*	491	-0.13	*	3220	-0.108									
		53	MC													+	343	0.101
	7	60	CR	+	491	0.138												
		11	CR	*	542	-0.106												
		20	CR							+	803	0.102						
		25	CR													*	338	-0.144
		33	CR				*	3071	-0.109				*	597	-0.106	*	338	-0.16
		55	CR							*	803	-0.11						
	8	60	CR	*	542	-0.306				*	803	-0.207				*	338	-0.153
		4	CR	*	580	-0.113										*	364	-0.197
		34	CR	*	580	-0.16	*	2822	-0.118	*	735	-0.114						

<sup>1</sup> DIF is not reported for N less than 100. Flag +=favoring and \*=disfavoring focal group.

<sup>2</sup> Other includes limited intellectual capacity, hearing disability, visual disability, deaf-blind, multiple disabilities, autism, and traumatic brain injury.

Table 244. Items Flagged for DIF by Primary Disability State (continued)

				Primary Disability State Focal Group														
				Emotional			Specific Learning Disability			Physical			Speech/Language			Other		
Content	Grade	Item #	Item Type	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
MATH	8	44	CR	*	580	-0.122				*	735	-0.111				*	364	-0.179
		55	CR	*	580	-0.144				*	735	-0.102				*	364	-0.138
	9	20	CR	*	715	-0.136												
		23	CR	+	715	0.112												
		54	CR	*	715	-0.134										*	335	-0.136
		60	CR	*	715	-0.217				*	760	-0.12						
	10	1	MC										+	225	0.107			
		22	MC										+	225	0.104			
		48	CR										*	225	-0.162			
		60	CR	*	614	-0.129							+	225	0.156			
READING	3	1	CR	*	330	-0.205				*	564	-0.125				*	350	-0.214
		25	CR	*	330	-0.214	*	2250	-0.1	*	564	-0.152						
		31	CR	*	330	-0.113												
	4	11	CR	*	426	-0.118												
		31	MC	*	426	-0.118												
		42	MC	*	426	-0.138				*	697	-0.107						
		22	CR	*	426	-0.138				*	697	-0.107						
		43	MC	*	426	-0.161				*	697	-0.117				*	356	-0.151
		100	MC	*	426	-0.175				*	697	-0.11						
		97	MC	*	469	-0.22				*	700	-0.158						
	5	6	CR	*	469	-0.22				*	700	-0.158						
		101	MC													*	367	-0.176
		10	CR													*	367	-0.176
		102	MC	*	469	-0.175												
		11	CR	*	469	-0.175												
		103	MC	*	469	-0.123												
		12	CR	*	469	-0.123												
		28	CR	*	469	-0.108												
		35	CR	*	469	-0.119												
		43	CR	*	469	-0.234										*	367	-0.128
		48	CR	*	469	-0.114												
	6	30	MC	*	488	-0.185				*	772	-0.151				*	345	-0.129
		6	CR	*	488	-0.185				*	772	-0.151				*	345	-0.129
		11	CR	*	488	-0.185				*	772	-0.132						
		35	MC	*	488	-0.185				*	772	-0.132						

Table 244. Items Flagged for DIF by Primary Disability State (continued)

				Primary Disability State Focal Group														
				Emotional			Specific Learning Disability			Physical			Speech/Language			Other		
Content	Grade	Item #	Item Type	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
R E A D I N G	6	12	CR	*	488	-0.189												
		36	CR	*	488	-0.189												
		42	MC	*	488	-0.104												
		18	CR	*	488	-0.104												
		48	MC	*	488	-0.174				*	772	-0.114						
		24	CR	*	488	-0.174				*	772	-0.114						
		94	CR	*	488	-0.102												
		106	CR													+	345	0.137
		116	MC	*	488	-0.186				*	772	-0.102						
	7	29	MC							+	802	0.145						
		4	CR							+	802	0.145						
		31	MC	*	542	-0.102				*	802	-0.103				*	335	-0.115
		6	CR	*	542	-0.102				*	802	-0.103				*	335	-0.115
		11	CR	*	542	-0.191										*	335	-0.134
		36	MC	*	542	-0.191										*	335	-0.134
		25	CR	*	542	-0.159				*	802	-0.103						
		95	MC													*	335	-0.112
		98	MC	*	542	-0.128												
		102	MC	+	542	0.116												
		108	MC	*	542	-0.169				*	802	-0.134	*	596	-0.115	*	335	-0.111
	8	13	CR	*	574	-0.189										*	370	-0.108
		31	MC	*	574	-0.189										*	370	-0.108
		39	MC	*	574	-0.103												
		42	CR	+	574	0.113												
		44	MC	+	574	0.108												
		45	MC	*	574	-0.305				*	735	-0.202				*	370	-0.15
		97	MC	*	574	-0.12												
		99	MC	*	574	-0.108												
		101	MC	*	574	-0.109												
		106	MC	*	574	-0.155												
		110	MC	*	574	-0.138				*	735	-0.207						
	9	4	CR	*	716	-0.124				*	753	-0.135				*	335	-0.158
		26	MC	*	716	-0.124				*	753	-0.135				*	335	-0.158
		10	MC	+	716	0.104				+	753	0.105						
		32	MC	+	716	0.104				+	753	0.105						

Table 244. Items Flagged for DIF by Primary Disability State (continued)

				Primary Disability State Focal Group														
				Emotional			Specific Learning Disability			Physical			Speech/Language			Other		
Content	Grade	Item #	Item Type	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
READING	9	11	MC													+	335	0.102
		33	MC													+	335	0.102
		92	MC	*	716	-0.135												
		106	MC	*	716	-0.179										*	335	-0.119
		110	MC										*	310	-0.113			
		115	CR	*	716	-0.109												
	10	96	CR	+	607	0.104				+	726	0.136						
		4	MC	+	607	0.104				+	726	0.136						
		97	MC							*	726	-0.103				*	318	-0.157
		5	CR							*	726	-0.103				*	318	-0.157
		31	CR							*	726	-0.104						
		32	MC										*	227	-0.101			
		36	CR													*	318	-0.121
		47	CR										+	227	0.192			
SCIENCE	5	24	CR				*	3260	-0.157									
		29	CR													*	367	-0.101
		55	CR	*	475	-0.203	*	3260	-0.165	*	695	-0.113				*	367	-0.102
		57	MC													+	367	0.103
		65	MC	*	475	-0.133												
		66	CR	*	475	-0.109												
		75	CR	*	475	-0.119				*	695	-0.1				*	367	-0.11
	8	1	MC	+	578	0.124				+	739	0.12						
		14	CR	+	578	0.127												
		24	CR	*	578	-0.501	*	2825	-0.204	*	739	-0.334				*	367	-0.266
		25	CR	*	578	-0.112				*	739	-0.126						
		37	CR													*	367	-0.171
	10	21	CR	*	614	-0.398				*	738	-0.306				*	318	-0.314
		22	CR	*	614	-0.118												
		24	CR	*	614	-0.19										*	318	-0.139
		26	CR	*	614	-0.101												
		60	MC										+	225	0.116			
		77	CR										+	225	0.126			
WRITING	3	1C	CR				*	2251	-0.122									
	3	9	MC													*	347	-0.111
	3	15	MC													*	347	-0.109

Table 244. Items Flagged for DIF by Primary Disability State (continued)

				Primary Disability State Focal Group														
				Emotional			Specific Learning Disability			Physical			Speech/Language			Other		
Content	Grade	Item #	Item Type	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
W R I T I N G	3	17	MC	+	334	0.124	+	2251	0.107									
		19	MC				+	2251	0.1									
		20	MC				+	2251	0.121									
		39C	CR	*	334	-0.106												
	4	3B	CR	*	430	-0.203	*	2767	-0.127	*	700	-0.11						
		53	MC	*	430	-0.186										*	356	-0.129
		74	MC	*	430	-0.363				*	700	-0.22						
		85	MC	+	430	0.103												
		87	MC	+	430	0.141												
		88	MC	+	430	0.104												
		90	MC				+	2767	0.146							+	356	0.119
	5	2F	CR				*	3234	-0.177									
		3A	CR	*	470	-0.23				*	700	-0.121				*	365	-0.22
		3B	CR	*	470	-0.25	*	3234	-0.101	*	700	-0.159				*	365	-0.19
		3C	CR	*	470	-0.104												
		64	CR	*	470	-0.346				*	700	-0.219				*	365	-0.145
		116	CR	*	470	-0.346				*	700	-0.219				*	365	-0.145
		73	MC	+	470	0.108												
		89	MC													+	365	0.101
		94	CR	*	470	-0.261				*	700	-0.128						
	6	2D	CR				*	3210	-0.145									
		3A	CR	*	491	-0.118				*	775	-0.112				*	346	-0.153
		3B	CR	*	491	-0.124				*	775	-0.113				*	346	-0.165
		51	MC	*	491	-0.176	+	3210	0.156									
		68	MC	+	491	0.138												
		78	MC	*	491	-0.269				*	775	-0.135				*	346	-0.131
	7	3A	CR	*	543	-0.182										*	335	-0.112
		3B	CR	*	543	-0.184										*	335	-0.133
		48	MC	*	543	-0.324				*	799	-0.173						
		53	MC	+	543	0.102												
		69	MC	*	543	-0.322				*	799	-0.11				*	335	-0.106
		89	CR	+	543	0.106												
	8	2F	CR				*	2812	-0.135									
		3A	CR	*	575	-0.142				*	733	-0.143				*	372	-0.168
		3B	CR	*	575	-0.199				*	733	-0.142				*	372	-0.144



Table 244. Items Flagged for DIF by Primary Disability State (continued)

				Primary Disability State Focal Group														
				Emotional			Specific Learning Disability			Physical			Speech/Language			Other		
Content	Grade	Item #	Item Type	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
W R I T I N G	8	51	MC	*	575	0.238							+	415	0.111			
		73	MC	+	575	0.115												
		75	MC	*	575	-0.232							+	415	0.112			
	9	2E	CR										*	310	-0.148			
		2F	CR				*	2874	-0.103									
		3A	CR	*	715	-0.163										*	336	-0.183
		3B	CR	*	715	-0.166				*	755	-0.124				*	336	-0.186
		47	MC	*	715	-0.206							+	310	0.181			
		66	MC	+	715	0.108												
		69	MC	*	715	-0.201							+	310	0.138			
	10	2B	CR				*	2368	-0.186									
		2D	CR										*	230	-0.106			
		2F	CR										*	230	-0.104			
		3A	CR	*	610	-0.123										*	320	-0.167
		3B	CR	*	610	-0.144										*	320	-0.109
		72	CR	*	610	-0.108	+	2368	0.122				+	230	0.159			
		83	MC													+	320	0.118
		95	CR	*	610	-0.196	+	2368	0.139				+	230	0.199			

**Table 245. Items Flagged for DIF by Enrollment Focal Group**

				Enrollment Focal Group <sup>1</sup>								
				Cont. Enroll in CO No			Cont. Enroll in US No			Cont. Enroll in US Yes		
Content	Grade	Item #	Item Type	Flag	N	Obs- Prd	Flag	N	Obs- Prd	Flag	N	Obs- Prd
Mathematics	9	8	CR							*	6750	-0.119
Science	8	24	CR				*	10392	-0.140			
Science	10	21	CR	*	9884	-0.109	*	12045	-0.111			

<sup>1</sup> Flag +=favoring and \*=disfavoring focal group.

<sup>1</sup> DIF is not reported for N less than 100. Flag +=favoring and \*=disfavoring focal group.

Table 246. Items Flagged for DIF by Language Proficiency Focal Group

				Language Proficiency Focal Group <sup>1</sup>														
Content	Grade	Item #	Item Type	Bilingual			ESL			FEP			LEP			NEP		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
M A T H E M A T I C S	4	15	CR													*	2156	-0.218
		18	CR	+	813	0.229	+	10837	0.104				+	7066	0.121	+	2156	0.135
		30	CR													+	2156	0.105
		46	CR													+	2156	0.102
		49	CR													*	2156	-0.109
		65	CR										*	7066	-0.105			
		69	CR	+	813	0.283	+	10837	0.129	+	2388	0.104	+	7066	0.16	+	2156	0.114
	5	10	CR										+	5954	0.119			
		17	CR													*	1228	-0.158
		22	MC													*	1228	-0.115
		33	CR	+	677	0.115												
		43	MC													+	1228	0.123
		54	CR	+	677	0.126	+	10030	0.111				+	5954	0.136	+	1228	0.102
		66	CR													*	1228	-0.159
	6	14	MC													*	934	-0.106
		24	MC													+	934	0.132
		29	CR	+	271	0.15												
		37	CR													*	934	-0.138
		43	CR										*	5102	-0.141	*	934	-0.153
		53	MC	+	271	0.126										+	934	0.176
		55	MC													+	934	0.106
		57	CR	+	271	0.115												
	7	6	MC													+	785	0.1
		11	CR										*	4203	-0.115	*	785	-0.155
		12	MC													*	785	-0.13
		14	CR	*	270	-0.144												
		16	MC	*	270	-0.112												
		18	MC													*	785	-0.121
		25	CR													*	785	-0.137
		29	CR													*	785	-0.113
		33	CR													*	785	-0.257
		35	CR															
		52	MC	+	270	0.102							+	4203	0.102	+	785	0.109
		55	CR													+	785	0.206

<sup>1</sup> DIF is not reported for N less than 100. Flag +=favoring and \*=-disfavoring focal group.

Table 246. Items Flagged for DIF by Language Proficiency Focal Group (continued)

				Language Proficiency Focal Group														
				Bilingual			ESL			FEP			LEP			NEP		
Content	Grade	Item #	Item Type	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
M A T H E M A T I C S	7	60	CR	+	270	0.229				+	4651	0.12				*	785	-0.176
	8	4	CR	+	261	0.138										*	674	-0.183
		5	MC													+	674	0.102
		8	CR										*	3553	-0.128	*	674	-0.165
		20	CR							*	4782	-0.124				+	674	0.135
		24	CR													+	674	0.161
		28	MC													+	674	0.16
		40	CR				+	8758	0.122				+	3553	0.153	+	674	0.16
		44	CR													*	674	-0.265
		48	CR	*	261	-0.2	*	8758	-0.105				*	3553	-0.169	*	674	-0.321
		60	CR	+	261	0.249							+	3553	0.138			
	9	8	CR							*	4811	-0.116				*	924	-0.112
		16	MC															
		20	CR										+	3031	0.1			
		23	CR	+	190	0.132							+	3031	0.105	+	924	0.14
		25	MC													+	924	0.108
		33	MC													*	924	-0.108
		35	CR										*	3031	-0.101	*	924	-0.146
	10	54	CR													*	924	-0.112
		8	MC													+	784	0.104
		19	MC													*	784	-0.121
		36	CR							*	4628	-0.129						
R E A D I N G	3	48	CR													*	784	-0.112
		6	CR													*	2237	-0.149
		9	MC	*	559	-0.121												
		25	CR	+	559	0.171							+	7342	0.117			
		28	MC	*	559	-0.215	*	10438	-0.128				*	7342	-0.149	*	2237	-0.111
	4	35	CR	+	559	0.163							+	7342	0.115			
		42	MC	+	781	0.135				+	2388	0.104						
		22	CR	+	781	0.135				+	2388	0.104						
		43	MC							+	2388	0.123						
		48	MC													*	2036	-0.118
		100	MC	+	781	0.108				+	2388	0.105						
	5	101	MC	*	693	-0.118										*	1208	-0.109
		10	CR	*	693	-0.118										*	1208	-0.109
		102	MC	+	693	0.166				+	3507	0.112	+	5949	0.113			

Table 246. Items Flagged for DIF by Language Proficiency Focal Group (continued)

				Language Proficiency Focal Group														
				Bilingual			ESL			FEP			LEP			NEP		
Content	Grade	Item #	Item Type	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
R E A D I N G	5	11	CR	+	693	0.166				+	3507	0.112	+	5949	0.113			
		39	MC	*	693	-0.123												
		43	CR	+	693	0.124	+	10032	0.15	+	3507	0.146	+	5949	0.155	+	1208	0.138
	6	30	MC				+	9940	0.125	+	4195	0.143	+	5081	0.132			
		6	CR				+	9940	0.125	+	4195	0.143	+	5081	0.132			
		31	MC	*	271	-0.109												
		7	MC	*	271	-0.109												
		11	CR				+	9940	0.148	+	4195	0.174	+	5081	0.116	+	928	0.214
		35	MC				+	9940	0.148	+	4195	0.174	+	5081	0.116	+	928	0.214
		12	CR										+	5081	0.129			
		36	CR										+	5081	0.129			
		48	MC	+	271	0.187												
		24	CR	+	271	0.187												
		97	MC							*	4195	-0.112						
		101	MC	+	271	0.144	+	9940	0.107	+	4195	0.108	+	5081	0.126			
		103	MC				*	9940	-0.101	*	4195	-0.155						
		108	MC	+	271	0.101												
		116	MC				+	9940	0.105	+	4195	0.142	+	5081	0.106			
	7	29	MC				*	9359	-0.123				*	4193	-0.208			
		4	CR				*	9359	-0.123				*	4193	-0.208			
		5	CR													*	776	-0.279
		30	MC													*	776	-0.279
		31	MC							+	4647	0.143						
		6	CR							+	4647	0.143						
		11	CR													*	776	-0.133
		36	MC													*	776	-0.133
		15	MC													+	776	0.104
		40	CR													+	776	0.104
		17	MC	+	271	0.152												
		42	MC	+	271	0.152												
		25	CR	+	271	0.226				+	4647	0.171						
		97	MC													+	776	0.103
		98	MC				+	9359	0.104	+	4647	0.115	+	4193	0.124			
		102	MC							*	4647	-0.108						
		108	MC							+	4647	0.107						
	8	22	CR													*	665	-0.207

Table 246. Items Flagged for DIF by Language Proficiency Focal Group (continued)

				Language Proficiency Focal Group														
				Bilingual			ESL			FEP			LEP			NEP		
Content	Grade	Item #	Item Type	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
R E A D I N G	8	4	MC													*	665	-0.207
		13	CR	+	260	0.21										+	665	0.193
		31	MC	+	260	0.21										+	665	0.193
		14	CR													*	665	-0.245
		32	MC													*	665	-0.245
		15	MC													*	665	-0.11
		33	MC													*	665	-0.11
		16	MC							*	4782	-0.137						
		34	MC							*	4782	-0.137						
		40	CR										*	3543	-0.101			
		45	MC	+	260	0.296	+	8737	0.271	+	4782	0.268	+	3543	0.295	+	665	0.182
		47	CR										+	3543	0.101	+	665	0.113
		101	MC				+	8737	0.101	+	4782	0.107	+	3543	0.128	*	665	-0.1
		102	MC							*	4782	-0.108						
		110	MC							+	4782	0.114				*	665	-0.151
		114	MC	*	260	-0.166	*	8737	-0.11				*	3543	-0.139			
	9	4	CR	+	181	0.145										+	919	0.279
		26	MC	+	181	0.145										+	919	0.279
		6	MC	*	181	-0.112	*	8602	-0.127	*	4813	-0.159	*	3028	-0.105			
		28	MC	*	181	-0.112	*	8602	-0.127	*	4813	-0.159	*	3028	-0.105			
		7	CR										+	3028	0.106	*	919	-0.25
		29	CR										+	3028	0.106	*	919	-0.25
		11	MC													+	919	0.13
		33	MC													+	919	0.13
		92	MC	+	181	0.246				+	4813	0.111						
		95	MC													+	919	0.121
		96	MC	*	181	-0.169												
		106	MC	+	181	0.16	+	8602	0.126	+	4813	0.146	+	3028	0.153			
		110	MC				*	8602	-0.101				*	3028	-0.123			
		111	MC													+	919	0.186
		112	CR	*	181	-0.136	*	8602	-0.132				*	3028	-0.178	*	919	-0.15
	10	96	CR										*	2329	-0.11			
		4	MC										*	2329	-0.11			
		97	MC				+	7573	0.189	+	4619	0.228	+	2329	0.189			
		5	CR				+	7573	0.189	+	4619	0.228	+	2329	0.189			
		100	MC	*	177	-0.182										*	772	-0.127

Table 246. Items Flagged for DIF by Language Proficiency Focal Group (continued)

				Language Proficiency Focal Group														
Content	Grade	Item #	Item Type	Bilingual			ESL			FEP			LEP			NEP		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
R E A D I N G	10	8	MC	*	177	-0.182										*	772	-0.127
		102	MC													*	772	-0.117
		10	MC													*	772	-0.117
		11	CR							+	4619	0.116						
		103	MC							+	4619	0.116						
		12	MC	*	177	-0.115										*	772	-0.102
		104	MC	*	177	-0.115										*	772	-0.102
		105	MC										*	2329	-0.113	*	772	-0.18
		13	MC										*	2329	-0.113	*	772	-0.18
		28	CR				+	7573	0.153	+	4619	0.201	+	2329	0.124			
		29	CR	+	177	0.151	+	7573	0.17	+	4619	0.186	+	2329	0.125	+	772	0.234
		31	CR							+	4619	0.11						
		34	CR				+	7573	0.172	+	4619	0.177	+	2329	0.161	+	772	0.178
		36	CR													*	772	-0.109
		39	MC	*	177	-0.148	*	7573	-0.127	*	4619	-0.102	*	2329	-0.177	*	772	-0.144
		43	MC	*	177	-0.126							*	2329	-0.106			
		46	MC	*	177	-0.132	*	7573	-0.141	*	4619	-0.189						
		47	CR										+	2329	0.124			
S C I E N C E	5	16	MC													+	1224	0.111
		21	CR													*	1224	-0.156
		29	CR	*	672	-0.142	*	10029	-0.102				*	5957	-0.12	*	1224	-0.112
	8	1	MC							*	4773	-0.107						
		3	MC	+	260	0.104												
		22	CR	*	260	-0.197												
		24	CR				+	8734	0.259	+	4773	0.252	+	3549	0.28	+	665	0.168
		33	CR	*	260	-0.121												
		37	CR													*	665	-0.139
		60	MC	+	260	0.13												
		82	CR	*	260	-0.129												
	10	21	CR	+	178	0.277	+	7584	0.241	+	4619	0.238	+	2332	0.28	+	782	0.163
		24	CR				+	7584	0.166	+	4619	0.214	+	2332	0.205	*	782	-0.251
		26	CR	+	178	0.111												
		29	CR													*	782	-0.135
		36	CR													*	782	-0.117
		42	MC													+	782	0.128
		65	CR													*	782	-0.174
		68	CR							*	4619	-0.107						

Table 246. Items Flagged for DIF by Language Proficiency Focal Group (continued)


				Language Proficiency Focal Group														
Content	Grade	Item #	Item Type	Bilingual			ESL			FEP			LEP			NEP		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
W R I T I N G	3	1B	CR	*	559	-0.1												
		16	MC				*	10443	-0.101				*	7326	-0.122			
		17	MC	*	559	-0.212	*	10443	-0.144				*	7326	-0.161	*	2268	-0.163
	4	2F	CR	*	780	-0.122												
		3A	CR	+	780	0.165												
		3B	CR	+	780	0.107												
		53	MC	+	780	0.332	+	10751	0.112				+	7055	0.131	+	2043	0.192
		63	MC	*	780	-0.128										*	2043	-0.117
		65	MC	*	780	-0.104												
		74	MC	+	780	0.219	+	10751	0.125				+	7055	0.135	+	2043	0.172
		79	MC	*	780	-0.109										*	2043	-0.148
		85	MC										*	7055	-0.101			
		87	MC	*	780	-0.169	*	10751	-0.1				*	7055	-0.123	*	2043	-0.134
	5	2D	CR													+	1209	0.115
		56	MC													*	1209	-0.147
		64	CR	+	692	0.158							+	5941	0.117	+	1209	0.11
		116	CR	+	692	0.158							+	5941	0.117	+	1209	0.11
		65	MC	+	692	0.104												
		69	MC	*	692	-0.215	*	10022	-0.131				*	5941	-0.169	*	1209	-0.242
		71	MC													*	1209	-0.149
		77	MC										*	5941	-0.103			
		78	MC	*	692	-0.111							*	5941	-0.123			
		94	CR	+	692	0.197	+	10022	0.112				+	5941	0.135	+	1209	0.281
	6	2C	CR													*	927	-0.127
		2E	CR	*	272	-0.191	*	9962	-0.141	*	4197	-0.118	*	5103	-0.167	*	927	-0.112
		51	MC	+	272	0.3										+	927	0.239
		54	MC	*	272	-0.122	*	9962	-0.126				*	5103	-0.173	*	927	-0.158
		55	MC													*	927	-0.133
		57	MC										*	5103	-0.116			
		58	MC	*	272	-0.11												
		78	MC	+	272	0.212							+	5103	0.122			
	7	2A	CR													*	775	-0.115
		2B	CR													*	775	-0.176
		3A	CR	+	270	0.111												
		3B	CR	+	270	0.114												
		48	MC	+	270	0.103	+	9365	0.111				+	4197	0.149	+	775	0.144



Table 246. Items Flagged for DIF by Language Proficiency Focal Group (continued)

				Language Proficiency Focal Group														
				Bilingual			ESL			FEP			LEP			NEP		
Content	Grade	Item #	Item Type	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
W R I T I N G	7	56	MC										*	4197	-0.119	*	775	-0.14
		47	CR										*	4197	-0.119	*	775	-0.14
		61	MC										*	4197	-0.116			
		69	MC	+	270	0.116	+	9365	0.118				+	4197	0.166			
		83	MC	+	270	0.102							+	4197	0.109			
		89	CR	*	270	-0.142	*	9365	-0.131				*	4197	-0.181	*	775	-0.1
	8	2B	CR													*	670	-0.122
		2C	CR													*	670	-0.101
		2D	CR													+	670	0.119
		2F	CR	+	259	0.103												
		3A	CR	+	259	0.117							+	3553	0.137			
		51	MC	+	259	0.155	+	8752	0.101				+	3553	0.157	+	670	0.125
		63	MC	+	259	0.12							+	3553	0.127	+	670	0.118
		71	MC													*	670	-0.106
		73	MC	*	259	-0.201	*	8752	-0.177				*	3553	-0.283	*	670	-0.224
		75	MC	+	259	0.195	+	8752	0.121				+	3553	0.167			
		76	MC													*	670	-0.115
		90	MC				*	8752	-0.105	*	4781	-0.133						
		92	CR	*	259	-0.108				*	4781	-0.105						
	9	2F	CR	+	182	0.102												
		3B	CR													*	925	-0.107
		47	MC				+	8604	0.123				+	3025	0.188			
		52	MC	*	182	-0.109	*	8604	-0.157	*	4811	-0.104	*	3025	-0.24	*	925	-0.155
		53	MC	*	182	-0.162	*	8604	-0.165	*	4811	-0.192	*	3025	-0.163			
		54	MC	*	182	-0.128	*	8604	-0.118				*	3025	-0.179	*	925	-0.198
		60	MC													+	925	0.1
		66	MC				*	8604	-0.104	*	4811	-0.11	*	3025	-0.121			
		69	MC	+	182	0.156	+	8604	0.169	+	4811	0.124	+	3025	0.213	+	925	0.269
	10	2A	CR										*	2328	-0.134	*	773	-0.279
		2B	CR	+	177	0.114												
		2F	CR													*	773	-0.122
		3A	CR													*	773	-0.13
		3B	CR													*	773	-0.116
		65	MC							*	4610	-0.104	*	2328	-0.106			
		70	MC										*	2328	-0.118			
		72	CR	+	177	0.175	+	7564	0.14	+	4610	0.131	+	2328	0.19			

**Table 246. Items Flagged for DIF by Language Proficiency Focal Group (continued)**

 Content Grade Item # Item Type				Language Proficiency Focal Group														
				Bilingual			ESL			FEP			LEP			NEP		
Content	Grade	Item #	Item Type	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
WRITING	10	73	MC										*	2328	-0.101			
		75	MC													+	773	0.1
		85	MC													+	773	0.136
		88	MC	*	177	-0.123	*	7564	-0.116				*	2328	-0.163	*	773	-0.176
		93	MC													+	773	0.128
		95	CR	+	177	0.208	+	7564	0.173	+	4610	0.148	+	2328	0.236	+	773	0.151

**Table 247. Items Flagged for DIF by Education Plan Focal Group**

				Education Plan Focal Group <sup>1</sup>											
				504			Gate			IEP			Title <sup>1</sup>		
Content	Grade	Item #	Item Type	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Mathematics	4	49	CR							*	5741	-0.108			
Mathematics	5	10	CR	*	405	-0.102									
Mathematics	5	17	CR							*	5968	-0.14			
Mathematics	5	35	CR							+	5968	0.102			
Mathematics	7	33	CR							*	5352	-0.107			
Mathematics	7	60	CR	*	628	-0.122				*	5352	-0.1			
Mathematics	8	4	CR	*	678	-0.111				*	4907	-0.103			
Mathematics	8	20	CR				+	1567	0.104						
Mathematics	8	34	CR	*	678	-0.106				*	4907	-0.108			
Mathematics	9	8	CR										*	3887	-0.13
Mathematics	9	20	CR				+	1632	0.102				+	3887	0.142
Mathematics	9	60	CR							*	4990	-0.102			
Mathematics	10	36	CR										*	3426	-0.129
Mathematics	10	40	CR				+	1548	0.147				+	3426	0.106
Reading	3	1	CR				*	738	-0.154						
Reading	3	25	CR	*	226	-0.234	*	738	-0.138						
Reading	3	26	CR				*	738	-0.22						
Reading	4	43	MC				*	1457	-0.102						
Reading	4	100	MC	*	322	-0.155									
Reading	5	102	MC	*	404	-0.113									
Reading	5	11	CR	*	404	-0.113									
Reading	5	103	MC	*	404	-0.157									
Reading	5	12	CR	*	404	-0.157									
Reading	5	43	CR	*	404	-0.138									
Reading	6	30	MC	*	589	-0.113									
Reading	6	6	CR	*	589	-0.113									
Reading	6	11	CR	*	589	-0.113									
Reading	6	35	MC	*	589	-0.113									
Reading	6	101	MC	*	589	-0.102									
Reading	6	116	MC	*	589	-0.103	*	1493	-0.164						
Reading	7	31	MC				*	1472	-0.131						
Reading	7	6	CR				*	1472	-0.131						
Reading	7	108	MC				*	1472	-0.109						
Reading	8	13	CR	*	672	-0.127									
Reading	8	31	MC	*	672	-0.127									
Reading	8	45	MC	*	672	-0.24				*	4901	-0.12	+	9056	0.129
Reading	8	97	MC	*	672	-0.104									
Reading	8	110	MC	*	672	-0.136				*	4901	-0.112			
Reading	9	4	CR	*	808	-0.106									
Reading	9	26	MC	*	808	-0.106									
Reading	9	106	MC	*	808	-0.132									

1 DIF is not reported for N less than 100. Flag +=favoring and \*=disfavoring focal group.

**Table 247. Items Flagged for DIF by Education Plan (continued)**

				Education Plan Focal Group											
				504			Gate			IEP			Title		
Content	Grade	Item #	Item Type	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Reading	10	96	CR	+	768	0.101									
Reading	10	4	MC	+	768	0.101									
Reading	10	97	MC	*	768	-0.121							+	3425	0.121
Reading	10	5	CR	*	768	-0.121							+	3425	0.121
Reading	10	11	CR										+	3425	0.117
Reading	10	103	MC										+	3425	0.117
Reading	10	28	CR										+	3425	0.159
Reading	10	29	CR	*	768	-0.126							+	3425	0.135
Reading	10	31	CR										+	3425	0.129
Reading	10	34	CR	*	768	-0.101							+	3425	0.171
Reading	10	51	CR				*	1547	-0.125						
Science	5	24	CR							*	5969	-0.115			
Science	5	29	CR	*	400	-0.106									
Science	5	55	CR							*	5969	-0.137			
Science	5	75	CR	*	400	-0.124									
Science	8	1	MC	+	676	0.121									
Science	8	24	CR	*	676	-0.208				*	4925	-0.249	+	8551	0.133
Science	10	21	CR	*	775	-0.177				*	4277	-0.181	+	3431	0.134
Writing	3	1C	CR	*	231	-0.102									
Writing	4	3A	CR	*	323	-0.129									
Writing	4	3B	CR							*	5719	-0.109			
Writing	4	90	MC							+	5719	0.103			
Writing	5	2F	CR							*	5942	-0.105			
Writing	5	3B	CR				*	1502	-0.109	*	5942	-0.109			
Writing	5	64	CR	*	404	-0.112									
Writing	5	116	CR	*	404	-0.112									
Writing	5	94	CR	*	404	-0.133									
Writing	6	78	MC	*	588	-0.123									
Writing	7	48	MC	*	624	-0.104									
Writing	9	47	MC	*	807	-0.117									
Writing	9	53	MC										*	3891	-0.114
Writing	10	2B	CR							*	4254	-0.125			
Writing	10	72	CR	*	766	-0.126									
Writing	10	95	CR	*	766	-0.101									

**Table 248. Items Flagged for DIF by Homeless, Immigrant, Migrant, Free-Lunch**

				Focal Group <sup>1</sup>											
				Homeless			Immigrant			Migrant			Free Lunch		
Content	Grade	Item #	Item Type	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
M A T H E M A T I C S	3	14	MC							*	280	-0.129			
	4	8	MC				+	630	0.105						
		15	CR				*	630	-0.196						
		27	MC				+	630	0.121						
		46	CR				+	630	0.131						
		68	MC				+	630	0.116						
	5	27	CR				+	546	0.137						
		43	MC				+	546	0.114						
		46	CR				*	546	-0.105						
		49	CR							*	270	-0.151			
		54	CR				+	546	0.144	+	270	0.208			
		60	CR				*	546	-0.101						
		69	CR				*	546	-0.151						
	6	2	MC				+	540	0.116						
		14	MC				*	540	-0.134						
		24	MC				+	540	0.114						
		43	CR				*	540	-0.224						
		53	MC				+	540	0.129						
	7	3	CR				+	534	0.138						
		7	CR				*	534	-0.193						
		11	CR				*	534	-0.171						
		29	CR				*	534	-0.107	*	247	-0.111			
		33	CR				*	534	-0.108						
		35	CR				+	534	0.105						
		46	MC				+	534	0.108						
		55	CR				+	534	0.241	+	247	0.128			
		60	CR				*	534	-0.136						
	8	8	CR				*	559	-0.168						
		24	CR				+	559	0.145						
		28	MC				+	559	0.122						
		40	CR				+	559	0.187	+	224	0.129			
		44	CR				*	559	-0.112						

<sup>1</sup> DIF is not reported for N less than 100. Flag +=favoring and \*=disfavoring focal group.

Table 248. Items Flagged for DIF by Homeless, Immigrant, Migrant, Free-Lunch Eligible (continued)

				Focal Group <sup>1</sup>											
Content	Grade	Item #	Item Type	Homeless			Immigrant			Migrant			Free Lunch		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
M A T H E M A T I C S	8	46	MC				*	559	-0.1						
		48	CR				*	559	-0.39	*	224	-0.18			
		54	MC				*	559	-0.13						
	9	16	MC				*	597	-0.12						
		23	CR				+	597	0.16						
		25	MC				+	597	0.117						
		30	MC				+	597	0.122						
		33	MC				*	597	-0.11						
		35	CR				*	597	-0.17						
		40	CR				+	597	0.119						
		50	CR				*	597	-0.12						
		54	CR				*	597	-0.16						
	10	19	MC							*	182	-0.12			
		20	CR				+	586	0.14						
		28	CR				*	586	-0.14						
		48	CR				*	586	-0.14						
		52	CR				+	586	0.116						
		59	MC				+	586	0.107						
R E A D I N G	3	4	MC							*	258	-0.13			
		25	CR				+	754	0.114						
		28	MC				*	754	-0.13	*	258	-0.13			
		35	CR				+	754	0.115	+	258	0.158			
	4	42	MC				+	564	0.108						
		22	CR				+	564	0.108						
		100	MC				+	564	0.108						
	5	34	MC				*	545	-0.11	*	269	-0.12			
		35	CR				+	545	0.104						
		43	CR				+	545	0.186	+	269	0.133			
	6	31	MC				*	542	-0.15						
		7	MC				*	542	-0.15						
		11	CR				+	542	0.259	+	250	0.212			
		35	MC				+	542	0.259	+	250	0.212			
		100	MC				*	542	-0.11						
		101	MC				+	542	0.149	+	250	0.126			
		103	MC							*	250	-0.1			
	7	5	CR				*	526	-0.13						

Table 248. Items Flagged for DIF by Homeless, Immigrant, Migrant, Free-Lunch Eligible (continued)

				Focal Group <sup>1</sup>											
				Homeless			Immigrant			Migrant			Free Lunch		
Content	Grade	Item #	Item Type	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
R E A D I N G	7	30	MC				*	526	-0.128						
		12	CR				+	526	0.119	+	247	0.116			
		37	CR				+	526	0.119	+	247	0.116			
		95	MC				+	526	0.119						
	8	22	CR				*	549	-0.162						
		4	MC				*	549	-0.162						
		13	CR				+	549	0.164						
		31	MC				+	549	0.164						
		14	CR				*	549	-0.131						
		32	MC				*	549	-0.131						
		39	MC				+	549	0.105						
		44	MC							*	225	-0.109			
		45	MC				+	549	0.364	+	225	0.213	+	16950	0.117
		47	CR				+	549	0.117						
		97	MC				+	549	0.154						
		99	MC							+	225	0.151			
		101	MC							+	225	0.124			
		114	MC				*	549	-0.128	*	225	-0.116			
	9	4	CR				+	597	0.24						
		26	MC				+	597	0.24						
		7	CR				*	597	-0.131						
		29	CR				*	597	-0.131						
		10	MC							*	239	-0.101			
		32	MC							*	239	-0.101			
		35	MC							+	239	0.111			
		13	MC							+	239	0.111			
		98	CR				+	597	0.101						
		111	MC				+	597	0.167						
		112	CR				*	597	-0.198	*	239	-0.215			
		115	CR				+	597	0.13						
	10	96	CR							*	183	-0.113			
		4	MC							*	183	-0.113			
		97	MC				+	585	0.158				+	13525	0.108
		5	CR				+	585	0.158				+	13525	0.108
		100	MC				*	585	-0.158	*	183	-0.171			
		8	MC				*	585	-0.158	*	183	-0.171			

**Table 248. Items Flagged for DIF by Homeless, Immigrant, Migrant, Free-Lunch Eligible (continued)**

				Focal Group										
				Homeless			Immigrant			Migrant			Free Lunch	
Content	Grade	Item #	Item Type	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N
R E A D I N G	10	102	MC				*	585	-0.101	*	183	-0.104		
		10	MC				*	585	-0.101	*	183	-0.104		
		12	MC				*	585	-0.118	*	183	-0.131		
		104	MC				*	585	-0.118	*	183	-0.131		
		105	MC				*	585	-0.123	*	183	-0.127		
		13	MC				*	585	-0.123	*	183	-0.127		
		28	CR							+	183	0.224		
		29	CR				+	585	0.324					
		30	MC							+	183	0.105		
		34	CR				+	585	0.201	+	183	0.122		
		39	MC				*	585	-0.184	*	183	-0.172		
		46	MC							*	183	-0.148		
S C I E N C E	5	16	MC				+	551	0.103					
		21	CR				*	551	-0.132					
		29	CR							*	269	-0.112		
	8	24	CR				+	555	0.313					
		29	MC							+	225	0.117		
		33	CR				*	555	-0.101					
		37	CR				*	555	-0.105					
		45	MC							*	225	-0.119		
		69	MC				+	555	0.101					
	10	21	CR				+	587	0.163					
		24	CR				*	587	-0.224					
		28	MC							*	183	-0.11		
		36	CR				*	587	-0.138					
		65	CR				*	587	-0.145	*	183	-0.135		
72	MC							+	183	0.137				
W R I T I N G	3	16	MC							*	255	-0.122		
		17	MC				*	745	-0.162	*	255	-0.148		
	4	55	MC				*	567	-0.102					
		63	MC				*	567	-0.101					
		74	MC				+	567	0.121	+	292	0.147		
		79	MC				*	567	-0.159					
		87	MC				*	567	-0.132	*	292	-0.13		



Table 248. Items Flagged for DIF by Homeless, Immigrant, Migrant, Free-Lunch Eligible (continued)

				Focal Group											
				Homeless			Immigrant			Migrant			Free Lunch		
Content	Grade	Item #	Item Type	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
W R I T I N G	5	3A	CR				+	545	0.116						
		56	MC				*	545	-0.117						
		64	CR				+	545	0.105						
		116	CR				+	545	0.105						
		69	MC				*	545	-0.247	*	269	-0.153			
		71	MC				*	545	-0.114	*	269	-0.102			
		78	MC							*	269	-0.125			
		94	CR							+	269	0.173			
	6	2E	CR				*	545	-0.157	*	252	-0.111			
		54	MC				*	545	-0.173	*	252	-0.146			
		55	MC				*	545	-0.113						
		57	MC				*	545	-0.12						
		60	MC							*	252	-0.111			
	7	2B	CR				*	530	-0.187						
		48	MC				+	530	0.104	+	248	0.171			
		56	MC				*	530	-0.17	*	248	-0.106			
		47	CR				*	530	-0.17	*	248	-0.106			
		69	MC							+	248	0.116			
		73	MC							*	248	-0.101			
		83	MC				+	530	0.175						
		88	MC				*	530	-0.115						
		89	CR				*	530	-0.153	*	248	-0.13			
	8	2F	CR				+	552	0.111	+	225	0.103			
		51	MC							+	225	0.196			
		57	MC							*	225	-0.108			
		63	MC				+	552	0.122	+	225	0.109			
		71	MC				*	552	-0.113						
		73	MC				*	552	-0.292	*	225	-0.204			
		86	MC				+	552	0.109						
		92	CR							*	225	-0.128			
	9	2F	CR				+	597	0.106						
		52	MC				*	597	-0.177	*	240	-0.214			
		53	MC				*	597	-0.105	*	240	-0.143			
		54	MC				*	597	-0.24	*	240	-0.145			
		56	MC				+	597	0.119						
		62	MC				+	597	0.102						

**Table 248. Items Flagged for DIF by Homeless, Immigrant, Migrant, Free-Lunch Eligible (continued)**

				Focal Group											
				Homeless			Immigrant			Migrant			Free Lunch		
Content	Grade	Item #	Item Type	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
W R I T I N G	9	67	MC							+	240	0.102			
		69	MC				+	597	0.242	+	240	0.173			
		84	MC				+	597	0.108						
	10	2A	CR				*	582	-0.244	*	183	-0.145			
		55	MC				+	582	0.104						
		72	CR							+	183	0.14			
		73	MC				*	582	-0.139						
		77	MC				+	582	0.117						
		85	MC				+	582	0.104						
		88	MC				*	582	-0.196	*	183	-0.185			
		93	MC				+	582	0.114						
		95	CR				+	582	0.166	+	183	0.223			

**Table 249. Intercorrelations among Content Areas  
(Scale Scores)**

<b>Grade</b>	<b>Content Area</b>	<b>Reading</b>	<b>Writing</b>	<b>Mathematics</b>	<b>Science</b>
3	Reading	1.000	0.770	0.728	
	Writing	0.770	1.000	0.759	
	Mathematics	0.728	0.759	1.000	
4	Reading	1.000	0.809	0.766	
	Writing	0.809	1.000	0.786	
	Mathematics	0.766	0.786	1.000	
5	Reading	1.000	0.829	0.778	0.827
	Writing	0.829	1.000	0.782	0.774
	Mathematics	0.778	0.782	1.000	0.837
	Science	0.827	0.774	0.837	1.000
6	Reading	1.000	0.844	0.790	
	Writing	0.844	1.000	0.781	
	Mathematics	0.790	0.781	1.000	
7	Reading	1.000	0.849	0.774	
	Writing	0.849	1.000	0.779	
	Mathematics	0.774	0.779	1.000	
8	Reading	1.000	0.845	0.762	0.833
	Writing	0.845	1.000	0.770	0.791
	Mathematics	0.762	0.770	1.000	0.842
	Science	0.833	0.791	0.842	1.000
9	Reading	1.000	0.855	0.770	
	Writing	0.855	1.000	0.777	
	Mathematics	0.770	0.777	1.000	
10	Reading	1.000	0.843	0.753	0.824
	Writing	0.843	1.000	0.754	0.783
	Mathematics	0.753	0.754	1.000	0.841
	Science	0.824	0.783	0.841	1.000

**Table 250. Intercorrelations among Content Areas  
(Percentile Ranks)**

Grade	Content Area	Reading	Writing	Mathematics	Science
3	Reading	1.000	0.817	0.775	
	Writing	0.817	1.000	0.770	
	Mathematics	0.775	0.770	1.000	
4	Reading	1.000	0.859	0.799	
	Writing	0.859	1.000	0.791	
	Mathematics	0.799	0.791	1.000	
5	Reading	1.000	0.852	0.795	0.857
	Writing	0.852	1.000	0.783	0.773
	Mathematics	0.795	0.783	1.000	0.833
	Science	0.857	0.773	0.833	1.000
6	Reading	1.000	0.870	0.807	
	Writing	0.870	1.000	0.785	
	Mathematics	0.807	0.785	1.000	
7	Reading	1.000	0.865	0.784	
	Writing	0.865	1.000	0.786	
	Mathematics	0.784	0.786	1.000	
8	Reading	1.000	0.861	0.766	0.845
	Writing	0.861	1.000	0.772	0.795
	Mathematics	0.766	0.772	1.000	0.849
	Science	0.845	0.795	0.849	1.000
9	Reading	1.000	0.878	0.781	
	Writing	0.878	1.000	0.788	
	Mathematics	0.781	0.788	1.000	
10	Reading	1.000	0.870	0.774	0.841
	Writing	0.870	1.000	0.765	0.797
	Mathematics	0.774	0.765	1.000	0.854
	Science	0.841	0.797	0.854	1.000


**Table 251. Intercorrelations with Demographic Variables**

<b>Content</b>	<b>Grade</b>	<b>Language</b>	<b>Age</b>	<b>Gender</b>	<b>Am.Indian/ AK Native</b>	<b>Asian</b>	<b>Black</b>	<b>Hispanic</b>
Mathematics	03	English	-0.053	0.035	-0.033	0.068	-0.132	-0.312
Mathematics	04	English	-0.089	0.021	-0.040	0.073	-0.123	-0.290
Mathematics	05	English	-0.117	0.003	-0.046	0.080	-0.127	-0.274
Mathematics	06	English	-0.134	-0.025	-0.041	0.087	-0.121	-0.282
Mathematics	07	English	-0.166	-0.013	-0.038	0.091	-0.114	-0.297
Mathematics	08	English	-0.176	0.013	-0.037	0.087	-0.126	-0.287
Mathematics	09	English	-0.258	0.000	-0.039	0.072	-0.141	-0.297
Mathematics	10	English	-0.240	0.019	-0.041	0.070	-0.140	-0.290
Reading	03	English	-0.077	-0.100	-0.029	0.042	-0.102	-0.293
Reading	04	English	-0.095	-0.105	-0.027	0.036	-0.091	-0.297
Reading	05	English	-0.117	-0.112	-0.042	0.044	-0.099	-0.285
Reading	06	English	-0.123	-0.136	-0.035	0.049	-0.090	-0.304
Reading	07	English	-0.153	-0.151	-0.031	0.046	-0.093	-0.300
Reading	08	English	-0.162	-0.152	-0.030	0.041	-0.095	-0.301
Reading	09	English	-0.238	-0.166	-0.032	0.037	-0.108	-0.300
Reading	10	English	-0.224	-0.167	-0.029	0.030	-0.104	-0.269
Reading	03	Spanish	-0.076	-0.145	0.012		-0.068	-0.004
Reading	04	Spanish	-0.186	0.043	0.043			-0.111
Science	05	English	-0.082	0.032	-0.041	0.037	-0.139	-0.347
Science	08	English	-0.156	0.015	-0.035	0.050	-0.131	-0.333
Science	10	English	-0.221	0.013	-0.035	0.028	-0.128	-0.332
Writing	03	English	-0.084	-0.160	-0.034	0.049	-0.097	-0.262
Writing	04	English	-0.098	-0.166	-0.039	0.051	-0.088	-0.300
Writing	05	English	-0.126	-0.171	-0.049	0.061	-0.086	-0.269
Writing	06	English	-0.133	-0.175	-0.043	0.064	-0.091	-0.278
Writing	07	English	-0.162	-0.198	-0.035	0.066	-0.091	-0.303
Writing	08	English	-0.175	-0.213	-0.036	0.063	-0.094	-0.294
Writing	09	English	-0.248	-0.215	-0.040	0.040	-0.109	-0.293
Writing	10	English	-0.236	-0.198	-0.036	0.041	-0.100	-0.292
Writing	03	Spanish	-0.047	-0.204	-0.004		-0.010	-0.001
Writing	04	Spanish	-0.185	-0.071	-0.072			-0.060

**Table 252. Predictive Validity Coefficients**

<b>Content Area</b>	<b>Grade in 2009</b>	<b>Grade in 2010</b>	<b>Number Matched</b>	<b>Reliability 2009</b>	<b>Reliability 2010</b>	<b>Correlation <math>r_{2009-2010}</math></b>	<b>Validity Coefficient</b>
Mathematics	03	04	57693	0.94	0.94	0.82	0.88
Mathematics	04	05	56490	0.94	0.94	0.87	0.93
Mathematics	05	06	55399	0.94	0.93	0.88	0.94
Mathematics	06	07	54128	0.94	0.93	0.90	0.96
Mathematics	07	08	53525	0.94	0.93	0.90	0.96
Mathematics	08	09	53478	0.93	0.93	0.89	0.96
Mathematics	09	10	50745	0.93	0.92	0.89	0.96
Reading	03	04	56047	0.93	0.94	0.82	0.87
Reading	04	05	56028	0.93	0.93	0.87	0.93
Reading	05	06	55071	0.93	0.93	0.86	0.93
Reading	06	07	54012	0.93	0.92	0.86	0.93
Reading	07	08	53650	0.92	0.92	0.86	0.94
Reading	08	09	53852	0.93	0.93	0.85	0.92
Reading	09	10	51360	0.94	0.93	0.83	0.89
Spanish Reading	03	04	45	0.93	0.91	0.78	0.84
Writing	03	04	56185	0.92	0.91	0.75	0.82
Writing	04	05	56320	0.90	0.91	0.77	0.85
Writing	05	06	55265	0.91	0.91	0.79	0.87
Writing	06	07	54437	0.91	0.91	0.79	0.86
Writing	07	08	53918	0.90	0.91	0.80	0.89
Writing	08	09	54038	0.92	0.91	0.81	0.89
Writing	09	10	51588	0.91	0.92	0.79	0.86
Spanish Writing	03	04	45	0.87	0.85	0.74	0.86

**Table 253. Classification Consistency and Classification Accuracy for Mathematics Grade 3****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0410	0.0212	0.0005	0.0000	0.0626
Partially Proficient	0.0181	0.1226	0.0455	0.0000	0.1863
Proficient	0.0000	0.0434	0.2801	0.0610	0.3846
Advanced	0.0000	0.0000	0.0551	0.3115	0.3665
Sum	0.0591	0.1872	0.3812	0.3725	1.0000
Observed Score Dist.	0.0788	0.2110	0.3818	0.3284	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9603	0.9105	0.8839	0.7552
Chance Probability (Pc)	0.8857	0.6274	0.5340	0.3217
Kappa	0.6523	0.7599	0.7509	0.6391
Classification Accuracy	0.9726	0.9359	0.9173	0.8258

**Table 254. Classification Consistency and Classification Accuracy for Mathematics Grade 4****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0429	0.0126	0.0000	0.0000	0.0555
Partially Proficient	0.0137	0.1425	0.0357	0.0000	0.1919
Proficient	0.0000	0.0352	0.3351	0.0510	0.4213
Advanced	0.0000	0.0000	0.0555	0.2758	0.3313
Sum	0.0565	0.1903	0.4263	0.3268	1.0000
Observed Score Dist.	0.0840	0.2093	0.4162	0.2905	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9737	0.9291	0.8935	0.7963
Chance Probability (Pc)	0.8943	0.6279	0.5584	0.3276
Kappa	0.7515	0.8094	0.7588	0.6971
Classification Accuracy	0.9822	0.9510	0.9260	0.8592



**Table 255. Classification Consistency and Classification Accuracy for Mathematics Grade 5****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0466	0.0132	0.0000	0.0000	0.0598
Partially Proficient	0.0157	0.1804	0.0381	0.0000	0.2342
Proficient	0.0000	0.0427	0.3061	0.0354	0.3842
Advanced	0.0000	0.0000	0.0451	0.2768	0.3218
Sum	0.0622	0.2363	0.3893	0.3122	1.0000
Observed Score Dist.	0.0880	0.2525	0.3744	0.2851	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9711	0.9192	0.9195	0.8099
Chance Probability (Pc)	0.8854	0.5830	0.5669	0.3091
Kappa	0.7480	0.8063	0.8142	0.7248
Classification Accuracy	0.9785	0.9444	0.9452	0.8681

**Table 256. Classification Consistency and Classification Accuracy for Mathematics Grade 6****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0820	0.0215	0.0000	0.0000	0.1034
Partially Proficient	0.0234	0.1750	0.0516	0.0004	0.2505
Proficient	0.0000	0.0477	0.2895	0.0379	0.3750
Advanced	0.0000	0.0000	0.0391	0.2320	0.2711
Sum	0.1054	0.2442	0.3802	0.2702	1.0000
Observed Score Dist.	0.1254	0.2553	0.3691	0.2502	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9551	0.9003	0.9226	0.7784
Chance Probability (Pc)	0.8130	0.5440	0.6052	0.2879
Kappa	0.7599	0.7815	0.8040	0.6888
Classification Accuracy	0.9662	0.9341	0.9440	0.8444

**Table 257. Classification Consistency and Classification Accuracy for Mathematics Grade 7****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.1261	0.0338	0.0000	0.0000	0.1599
Partially Proficient	0.0355	0.2561	0.0399	0.0000	0.3315
Proficient	0.0000	0.0407	0.2162	0.0340	0.2908
Advanced	0.0000	0.0000	0.0298	0.1880	0.2178
Sum	0.1616	0.3306	0.2859	0.2219	1.0000
Observed Score Dist.	0.1781	0.3315	0.2824	0.2081	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9307	0.9195	0.9362	0.7863
Chance Probability (Pc)	0.7302	0.5001	0.6569	0.2669
Kappa	0.7431	0.8389	0.8140	0.7086
Classification Accuracy	0.9503	0.9374	0.9535	0.8412

**Table 258. Classification Consistency and Classification Accuracy for Mathematics Grade 8****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.1438	0.0415	0.0000	0.0000	0.1854
Partially Proficient	0.0386	0.1953	0.0482	0.0000	0.2822
Proficient	0.0000	0.0459	0.2065	0.0359	0.2883
Advanced	0.0000	0.0007	0.0366	0.2068	0.2441
Sum	0.1825	0.2834	0.2914	0.2427	1.0000
Observed Score Dist.	0.1967	0.2867	0.2868	0.2299	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9199	0.9052	0.9267	0.7525
Chance Probability (Pc)	0.6998	0.5022	0.6317	0.2571
Kappa	0.7330	0.8095	0.8010	0.6668
Classification Accuracy	0.9452	0.9331	0.9538	0.8321

**Table 259. Classification Consistency and Classification Accuracy for Mathematics Grade 9****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.2447	0.0512	0.0003	0.0000	0.2962
Partially Proficient	0.0481	0.2005	0.0479	0.0000	0.2965
Proficient	0.0000	0.0383	0.1964	0.0230	0.2578
Advanced	0.0000	0.0000	0.0284	0.1212	0.1495
Sum	0.2928	0.2900	0.2730	0.1442	1.0000
Observed Score Dist.	0.2989	0.3015	0.2599	0.1397	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9004	0.9135	0.9486	0.7628
Chance Probability (Pc)	0.5844	0.5154	0.7494	0.2646
Kappa	0.7602	0.8215	0.7949	0.6774
Classification Accuracy	0.9339	0.9404	0.9634	0.8377

**Table 260. Classification Consistency and Classification Accuracy for Mathematics Grade 10****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.2643	0.0424	0.0004	0.0000	0.3070
Partially Proficient	0.0573	0.2754	0.0385	0.0000	0.3712
Proficient	0.0000	0.0407	0.2052	0.0150	0.2609
Advanced	0.0000	0.0000	0.0141	0.0468	0.0609
Sum	0.3216	0.3585	0.2582	0.0618	1.0000
Observed Score Dist.	0.3192	0.3688	0.2567	0.0553	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9000	0.9204	0.9709	0.7916
Chance Probability (Pc)	0.5689	0.5642	0.8849	0.3029
Kappa	0.7680	0.8174	0.7469	0.7011
Classification Accuracy	0.9270	0.9436	0.9793	0.8500

**Table 261. Classification Consistency and Classification Accuracy for Reading Grade 3****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0502	0.0121	0.0002	0.0000	0.0624
Partially Proficient	0.0143	0.0682	0.0272	0.0000	0.1096
Proficient	0.0000	0.0292	0.5756	0.0549	0.6597
Advanced	0.0000	0.0000	0.0641	0.1042	0.1683
Sum	0.0644	0.1094	0.6670	0.1591	1.0000
Observed Score Dist.	0.1140	0.1853	0.6389	0.0618	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9820	0.9580	0.9136	0.8535
Chance Probability (Pc)	0.8812	0.7139	0.7262	0.4828
Kappa	0.9735	0.9435	0.8810	0.7982
Classification Accuracy	0.7767	0.8024	0.5655	0.6097

**Table 262. Classification Consistency and Classification Accuracy for Reading Grade 4****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0853	0.0145	0.0000	0.0000	0.0999
Partially Proficient	0.0197	0.1777	0.0443	0.0000	0.2417
Proficient	0.0000	0.0363	0.5540	0.0228	0.6132
Advanced	0.0000	0.0000	0.0217	0.0236	0.0453
Sum	0.1051	0.2286	0.6200	0.0464	1.0000
Observed Score Dist.	0.1010	0.2351	0.6294	0.0345	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9658	0.9194	0.9555	0.8407
Chance Probability (Pc)	0.8160	0.5527	0.9125	0.4480
Kappa	0.8138	0.8198	0.4919	0.7114
Classification Accuracy	0.9769	0.9451	0.9712	0.8932



**Table 263. Classification Consistency and Classification Accuracy for Reading Grade 5****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0962	0.0222	0.0000	0.0000	0.1183
Partially Proficient	0.0200	0.1259	0.0367	0.0000	0.1826
Proficient	0.0000	0.0383	0.5220	0.0322	0.5924
Advanced	0.0000	0.0000	0.0346	0.0721	0.1066
Sum	0.1162	0.1864	0.5932	0.1042	1.0000
Observed Score Dist.	0.1131	0.1861	0.6120	0.0888	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9578	0.9251	0.9333	0.8162
Chance Probability (Pc)	0.7930	0.5786	0.8114	0.4103
Kappa	0.7962	0.8222	0.6462	0.6882
Classification Accuracy	0.9710	0.9461	0.9534	0.8705

**Table 264. Classification Consistency and Classification Accuracy for Reading Grade 6****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0765	0.0180	0.0004	0.0000	0.0949
Partially Proficient	0.0148	0.1318	0.0374	0.0000	0.1840
Proficient	0.0001	0.0322	0.5071	0.0408	0.5802
Advanced	0.0000	0.0000	0.0341	0.1067	0.1409
Sum	0.0914	0.1820	0.5791	0.1476	1.0000
Observed Score Dist.	0.0912	0.1810	0.5979	0.1299	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9667	0.9299	0.9250	0.8221
Chance Probability (Pc)	0.8311	0.6002	0.7531	0.3989
Kappa	0.8027	0.8248	0.6962	0.7040
Classification Accuracy	0.9772	0.9515	0.9464	0.8751

**Table 265. Classification Consistency and Classification Accuracy for Reading Grade 7****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0927	0.0224	0.0005	0.0000	0.1156
Partially Proficient	0.0161	0.1455	0.0416	0.0000	0.2033
Proficient	0.0003	0.0384	0.4976	0.0373	0.5737
Advanced	0.0000	0.0000	0.0366	0.0709	0.1074
Sum	0.1091	0.2063	0.5764	0.1082	1.0000
Observed Score Dist.	0.1088	0.2042	0.5943	0.0927	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9607	0.9191	0.9261	0.8067
Chance Probability (Pc)	0.8005	0.5668	0.8076	0.3968
Kappa	0.8031	0.8133	0.6158	0.6796
Classification Accuracy	0.9727	0.9388	0.9483	0.8598

**Table 266. Classification Consistency and Classification Accuracy for Reading Grade 8****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0850	0.0205	0.0000	0.0000	0.1055
Partially Proficient	0.0202	0.1440	0.0431	0.0000	0.2072
Proficient	0.0000	0.0490	0.5050	0.0331	0.5871
Advanced	0.0000	0.0000	0.0334	0.0668	0.1002
Sum	0.1052	0.2134	0.5815	0.0999	1.0000
Observed Score Dist.	0.1034	0.2072	0.6029	0.0865	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9593	0.9080	0.9335	0.8008
Chance Probability (Pc)	0.8115	0.5679	0.8200	0.4067
Kappa	0.7843	0.7870	0.6304	0.6642
Classification Accuracy	0.9699	0.9333	0.9534	0.8566

**Table 267. Classification Consistency and Classification Accuracy for Reading Grade 9****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0640	0.0154	0.0000	0.0000	0.0794
Partially Proficient	0.0155	0.1826	0.0381	0.0000	0.2362
Proficient	0.0000	0.0358	0.5677	0.0230	0.6265
Advanced	0.0000	0.0000	0.0219	0.0360	0.0579
Sum	0.0795	0.2338	0.6277	0.0591	1.0000
Observed Score Dist.	0.0753	0.2327	0.6471	0.0449	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9691	0.9261	0.9551	0.8503
Chance Probability (Pc)	0.8537	0.5689	0.8899	0.4582
Kappa	0.7885	0.8286	0.5923	0.7236
Classification Accuracy	0.9789	0.9453	0.9676	0.8918

**Table 268. Classification Consistency and Classification Accuracy for Reading Grade 10****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0797	0.0170	0.0000	0.0000	0.0966
Partially Proficient	0.0166	0.1564	0.0505	0.0000	0.2234
Proficient	0.0000	0.0454	0.5005	0.0321	0.5780
Advanced	0.0000	0.0000	0.0288	0.0731	0.1019
Sum	0.0962	0.2187	0.5798	0.1052	1.0000
Observed Score Dist.	0.0937	0.2195	0.5925	0.0943	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9665	0.9041	0.9390	0.8096
Chance Probability (Pc)	0.8257	0.5666	0.8143	0.4040
Kappa	0.8077	0.7788	0.6715	0.6806
Classification Accuracy	0.9774	0.9347	0.9582	0.8703

**Table 269. Classification Consistency and Classification Accuracy for Science Grade 5****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0790	0.0220	0.0000	0.0000	0.1010
Partially Proficient	0.0272	0.3070	0.0546	0.0000	0.3888
Proficient	0.0000	0.0534	0.2671	0.0428	0.3633
Advanced	0.0000	0.0004	0.0379	0.1086	0.1469
Sum	0.1062	0.3828	0.3597	0.1514	1.0000
Observed Score Dist.	0.1353	0.3962	0.3402	0.1284	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9508	0.8916	0.9189	0.7617
Chance Probability (Pc)	0.8143	0.5002	0.7462	0.3124
Kappa	0.7349	0.7831	0.6806	0.6533
Classification Accuracy	0.9635	0.9230	0.9455	0.8321

**Table 270. Classification Consistency and Classification Accuracy for Science Grade 8****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.1789	0.0369	0.0003	0.0000	0.2160
Partially Proficient	0.0357	0.1919	0.0450	0.0000	0.2726
Proficient	0.0004	0.0449	0.3593	0.0232	0.4279
Advanced	0.0000	0.0000	0.0236	0.0599	0.0835
Sum	0.2149	0.2737	0.4283	0.0831	1.0000
Observed Score Dist.	0.2349	0.2763	0.4178	0.0710	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9268	0.9094	0.9531	0.7900
Chance Probability (Pc)	0.6619	0.5003	0.8473	0.3112
Kappa	0.7835	0.8187	0.6931	0.6951
Classification Accuracy	0.9496	0.9345	0.9650	0.8491



**Table 271. Classification Consistency and Classification Accuracy for Science Grade 10****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.2401	0.0407	0.0013	0.0000	0.2821
Partially Proficient	0.0403	0.1376	0.0513	0.0000	0.2292
Proficient	0.0011	0.0515	0.3469	0.0232	0.4227
Advanced	0.0000	0.0000	0.0195	0.0465	0.0660
Sum	0.2815	0.2298	0.4190	0.0697	1.0000
Observed Score Dist.	0.2899	0.2270	0.4251	0.0580	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9166	0.8947	0.9573	0.7711
Chance Probability (Pc)	0.5952	0.5003	0.8735	0.3138
Kappa	0.7939	0.7893	0.6628	0.6664
Classification Accuracy	0.9421	0.9248	0.9691	0.8362

**Table 272. Classification Consistency and Classification Accuracy for Writing Grade 3****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0533	0.0191	0.0000	0.0000	0.0724
Partially Proficient	0.0179	0.3366	0.0600	0.0000	0.4145
Proficient	0.0000	0.0602	0.2991	0.0421	0.4014
Advanced	0.0000	0.0000	0.0462	0.0655	0.1118
Sum	0.0712	0.4158	0.4054	0.1076	1.0000
Observed Score Dist.	0.0670	0.4259	0.4215	0.0856	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9631	0.8798	0.9116	0.7545
Chance Probability (Pc)	0.8667	0.5003	0.8047	0.3522
Kappa	0.7229	0.7594	0.5475	0.6210
Classification Accuracy	0.9742	0.9136	0.9397	0.8275

**Table 273. Classification Consistency and Classification Accuracy for Writing Grade 4****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0625	0.0210	0.0000	0.0000	0.0835
Partially Proficient	0.0211	0.3255	0.0573	0.0000	0.4039
Proficient	0.0000	0.0625	0.3112	0.0348	0.4085
Advanced	0.0000	0.0000	0.0344	0.0697	0.1041
Sum	0.0836	0.4090	0.4029	0.1045	1.0000
Observed Score Dist.	0.0786	0.4135	0.4214	0.0864	

**Indices for Classification Consistency and Classification Accuracy**

Category	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9579	0.8803	0.9307	0.7689
Chance Probability (Pc)	0.8468	0.5002	0.8132	0.3476
Kappa	0.7250	0.7604	0.6292	0.6457
Classification Accuracy	0.9688	0.9166	0.9516	0.8369

**Table 274. Classification Consistency and Classification Accuracy for Writing Grade 5****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0422	0.0156	0.0000	0.0000	0.0578
Partially Proficient	0.0164	0.2895	0.0549	0.0000	0.3608
Proficient	0.0000	0.0611	0.3635	0.0420	0.4665
Advanced	0.0000	0.0000	0.0394	0.0754	0.1149
Sum	0.0587	0.3661	0.4578	0.1174	1.0000
Observed Score Dist.	0.0527	0.3687	0.4825	0.0961	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9680	0.8840	0.9186	0.7706
Chance Probability (Pc)	0.8903	0.5122	0.7947	0.3625
Kappa	0.7083	0.7622	0.6036	0.6402
Classification Accuracy	0.9779	0.9188	0.9463	0.8431

**Table 275. Classification Consistency and Classification Accuracy for Writing Grade 6****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0380	0.0148	0.0000	0.0000	0.0528
Partially Proficient	0.0153	0.3066	0.0567	0.0000	0.3786
Proficient	0.0000	0.0577	0.3645	0.0358	0.4580
Advanced	0.0000	0.0000	0.0371	0.0735	0.1106
Sum	0.0533	0.3792	0.4582	0.1093	1.0000
Observed Score Dist.	0.0479	0.3756	0.4769	0.0996	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9698	0.8856	0.9271	0.7826
Chance Probability (Pc)	0.8995	0.5093	0.8043	0.3683
Kappa	0.7000	0.7669	0.6277	0.6558
Classification Accuracy	0.9785	0.9211	0.9507	0.8503

**Table 276. Classification Consistency and Classification Accuracy for Writing Grade 7****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0325	0.0139	0.0000	0.0000	0.0464
Partially Proficient	0.0127	0.3010	0.0545	0.0000	0.3682
Proficient	0.0000	0.0577	0.3414	0.0409	0.4400
Advanced	0.0000	0.0000	0.0381	0.1073	0.1454
Sum	0.0452	0.3726	0.4340	0.1482	1.0000
Observed Score Dist.	0.0413	0.3725	0.4576	0.1286	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9735	0.8878	0.9209	0.7822
Chance Probability (Pc)	0.9126	0.5140	0.7495	0.3518
Kappa	0.6962	0.7691	0.6843	0.6639
Classification Accuracy	0.9807	0.9178	0.9422	0.8408

**Table 277. Classification Consistency and Classification Accuracy for Writing Grade 8****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0225	0.0110	0.0000	0.0000	0.0335
Partially Proficient	0.0093	0.3073	0.0619	0.0000	0.3784
Proficient	0.0000	0.0603	0.3506	0.0413	0.4522
Advanced	0.0000	0.0000	0.0400	0.0958	0.1358
Sum	0.0318	0.3786	0.4525	0.1371	1.0000
Observed Score Dist.	0.0343	0.4082	0.4501	0.1075	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9797	0.8778	0.9186	0.7762
Chance Probability (Pc)	0.9368	0.5158	0.7643	0.3676
Kappa	0.6786	0.7477	0.6548	0.6461
Classification Accuracy	0.9858	0.9160	0.9442	0.8461

**Table 278. Classification Consistency and Classification Accuracy for Writing Grade 9****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0436	0.0157	0.0000	0.0000	0.0593
Partially Proficient	0.0164	0.3701	0.0525	0.0000	0.4390
Proficient	0.0000	0.0546	0.3293	0.0315	0.4154
Advanced	0.0000	0.0000	0.0261	0.0602	0.0863
Sum	0.0600	0.4404	0.4079	0.0917	1.0000
Observed Score Dist.	0.0546	0.4465	0.4245	0.0744	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9679	0.8929	0.9424	0.8031
Chance Probability (Pc)	0.8878	0.5000	0.8379	0.3743
Kappa	0.7136	0.7857	0.6447	0.6853
Classification Accuracy	0.9772	0.9239	0.9605	0.8617



**Table 279. Classification Consistency and Classification Accuracy for Writing Grade 10****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0756	0.0171	0.0000	0.0000	0.0927
Partially Proficient	0.0176	0.3416	0.0644	0.0000	0.4236
Proficient	0.0000	0.0549	0.2917	0.0347	0.3813
Advanced	0.0000	0.0000	0.0327	0.0697	0.1025
Sum	0.0932	0.4136	0.3888	0.1044	1.0000
Observed Score Dist.	0.0923	0.4215	0.3972	0.0890	

**Indices for Classification Consistency and Classification Accuracy**

	Cut1	Cut2	Cut3	All Cuts
Classification Agreement (P)	0.9654	0.8807	0.9326	0.7786
Chance Probability (Pc)	0.8314	0.5002	0.8145	0.3428
Kappa	0.7947	0.7612	0.6365	0.6632
Classification Accuracy	0.9735	0.9164	0.9526	0.8425

**Table 280. Classification Consistency and Classification Accuracy for Spanish Reading Grade 3****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.1402	0.0293	0.0016	0.0000	0.1711
Partially Proficient	0.0338	0.1201	0.0514	0.0000	0.2053
Proficient	0.0011	0.0557	0.3883	0.0493	0.4945
Advanced	0.0000	0.0000	0.0406	0.0885	0.1291
Sum	0.1751	0.2052	0.4819	0.1378	1.0000
Observed Score Dist.	0.1689	0.2004	0.5162	0.1145	

**Indices for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9342	0.8901	0.9101	0.7371
Chance Probability ( $P_c$ )	0.7137	0.5296	0.7687	0.3282
Kappa	0.7701	0.7665	0.6113	0.6087
Classification Accuracy	0.9511	0.9169	0.9378	0.8059

**Table 281. Classification Consistency and Classification Accuracy for Spanish Reading Grade 4****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.2899	0.0497	0.0003	0.0000	0.3399
Partially Proficient	0.0493	0.1740	0.0466	0.0000	0.2698
Proficient	0.0005	0.0479	0.3058	0.0105	0.3647
Advanced	0.0000	0.0000	0.0089	0.0166	0.0255
Sum	0.3397	0.2717	0.3617	0.0270	1.0000
Observed Score Dist.	0.3554	0.2771	0.3434	0.0241	

**Indices for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9002	0.9046	0.9806	0.7863
Chance Probability ( $P_c$ )	0.5513	0.5244	0.9489	0.3214
Kappa	0.7775	0.7995	0.6212	0.6851
Classification Accuracy	0.9285	0.9321	0.9876	0.8481

**Table 282. Classification Consistency and Classification Accuracy for Spanish Writing  
Grade 3****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.1091	0.0318	0.0004	0.0000	0.1414
Partially Proficient	0.0300	0.1427	0.0577	0.0003	0.2307
Proficient	0.0005	0.0547	0.2686	0.0624	0.3862
Advanced	0.0000	0.0001	0.0599	0.1817	0.2417
Sum	0.1396	0.2294	0.3866	0.2444	1.0000
Observed Score Dist.	0.1332	0.2354	0.3975	0.2339	

**Indices for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9373	0.8863	0.8773	0.7022
Chance Probability ( $P_c$ )	0.7585	0.5335	0.6320	0.2810
Kappa	0.7404	0.7562	0.6666	0.5857
Classification Accuracy	0.9541	0.9218	0.9102	0.7862

**Table 283. Classification Consistency and Classification Accuracy for Spanish Writing Grade 4****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.3844	0.0782	0.0010	0.0000	0.4636
Partially Proficient	0.0646	0.1973	0.0445	0.0000	0.3065
Proficient	0.0010	0.0519	0.1642	0.0040	0.2210
Advanced	0.0000	0.0000	0.0036	0.0053	0.0089
Sum	0.4500	0.3274	0.2133	0.0093	1.0000
Observed Score Dist.	0.3313	0.3976	0.2530	0.0181	

**Indices for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.8552	0.9016	0.9924	0.7512
Chance Probability ( $P_c$ )	0.5036	0.6499	0.9820	0.3562
Kappa	0.7082	0.7191	0.5801	0.6136
Classification Accuracy	0.8995	0.9316	0.9943	0.8254

**Table 284. Mean and Median Scale Scores by Year for Writing Subcontent Areas:  
Paragraph Writing and Extended Writing**

			Paragraph Writing (SA5)			Extended Writing (SA6)			Combine SA5 and SA6		
Grade	Year	N	Mean	Median	SD	Mean	Median	SD	Mean	Median	SD
4	2002	55488	489	491	72.8	504	486	99.3	488	485	60.3
4	2003	55108	486	479	73.5	497	479	91.7	486	486	64.7
4	2004	54546	492	490	65.9	517	505	107.6	492	489	59.5
4	2005	54339	494	486	74.3	504	516	98.6	490	488	64.8
4	2006	55640	486	488	66.1	510	495	109.6	486	484	60.3
4	2007	56278	487	481	64.5	494	479	87.8	485	482	58.9
4	2008	57957	489	487	64.7	517	495	112.7	489	487	59.5
4	2009	59548	487	485	64.0	504	527	106.7	486	484	60.9
4	2010	61099	487	486	64.7	501	490	97.2	486	485	59.9
5	2002	56398	503	503	66.0	518	503	105.8	502	501	60.4
5	2003	56822	503	504	72.3	531	500	121.1	504	503	65.3
5	2004	55946	505	500	73.5	525	508	107.7	507	505	66.4
5	2005	55191	512	509	70.5	543	525	130.2	510	506	65.5
5	2006	55800	513	511	72.7	533	484	114.2	514	511	69.4
5	2007	56704	509	507	65.9	531	538	112.9	508	506	62.4
5	2008	57019	512	510	75.2	535	536	120.2	512	510	71.6
5	2009	58785	510	509	65.9	536	532	117.3	510	508	63.1
5	2010	59745	509	507	74.0	521	504	100.2	508	508	66.8
6	2002	55632	518	518	76.1	528	529	95.2	518	518	68.4
6	2003	56674	521	521	71.2	549	524	123.8	523	523	67.5
6	2004	56744	523	522	73.7	559	547	134.6	524	521	70.1
6	2005	56200	532	527	82.8	536	496	106.2	529	528	74.0
6	2006	56097	531	526	82.9	542	490	116.2	529	526	76.5
6	2007	56380	530	527	80.0	539	600	104.0	529	528	74.6
6	2008	56901	533	530	83.4	558	538	138.4	531	526	78.1
6	2009	57379	530	528	73.9	545	576	114.9	529	528	69.2
6	2010	58856	527	524	80.8	535	522	103.5	525	523	71.6
7	2002	54338	544	541	79.8	558	542	106.0	543	541	70.3
7	2003	56609	544	546	78.9	580	554	141.4	547	548	73.9
7	2004	57016	546	543	94.4	574	557	147.7	545	542	85.5
7	2005	57201	551	546	90.2	552	503	113.6	548	545	82.7
7	2006	57323	550	548	91.5	577	577	145.3	550	549	83.8
7	2007	56769	561	555	88.8	573	648	105.0	560	556	82.5
7	2008	56813	553	550	89.0	580	572	142.7	553	554	83.1
7	2009	57395	562	557	84.1	575	622	118.3	561	559	78.8
7	2010	57773	556	552	88.1	575	588	133.8	555	554	81.7

**Table 284. Mean and Median Scale Scores by Year for Writing Subcontent Areas:  
Paragraph Writing and Extended Writing (Concluded)**

			Paragraph Writing (SA5)			Extended Writing (SA6)			Combine SA5 and SA6		
Grade	Year	N	Mean	Median	SD	Mean	Median	SD	Mean	Median	SD
8	2002	53466	554	551	85.9	586	586	124.3	558	557	76.0
8	2003	54894	555	556	82.4	590	592	136.5	558	558	79.4
8	2004	56410	556	555	90.1	576	583	142.1	554	553	84.4
8	2005	56821	559	557	87.4	572	558	127.7	558	555	82.1
8	2006	58095	560	558	87.6	557	552	125.0	556	556	83.1
8	2007	57631	563	559	94.0	577	601	119.5	562	556	86.6
8	2008	56658	564	561	91.9	580	612	131.2	563	562	87.8
8	2009	57100	564	559	87.3	582	587	116.2	563	561	79.1
8	2010	57103	566	566	83.5	615	567	168.4	566	564	79.7
9	2002	52972	563	563	92.0	581	637	121.7	564	564	87.2
9	2003	55540	572	570	98.0	611	593	157.0	573	569	90.9
9	2004	56588	571	569	94.8	580	545	94.6	572	572	79.7
9	2005	57703	569	569	96.1	576	524	104.9	568	564	84.8
9	2006	58795	570	570	96.1	568	536	105.2	567	561	88.0
9	2007	59521	569	564	97.3	580	635	124.1	567	563	89.1
9	2008	59076	567	563	98.2	569	498	448.8	565	559	90.0
9	2009	58939	572	567	95.9	590	616	130.3	570	568	87.3
9	2010	59098	565	562	97.7	614	575	180.1	565	560	92.9
10	2002	49009	587	588	96.7	606	580	138.4	586	585	88.8
10	2003	49658	591	583	107.6	641	590	185.8	589	583	100.0
10	2004	50756	584	577	96.7	588	537	117.2	581	578	84.8
10	2005	51638	580	576	97.5	582	529	111.0	578	575	88.2
10	2006	53754	584	581	101.2	586	523	112.1	581	578	91.1
10	2007	54683	586	579	104.9	594	649	123.2	583	583	94.0
10	2008	55306	579	572	109.3	590	635	142.5	577	573	100.9
10	2009	55818	584	578	102.3	596	638	119.7	582	581	91.7
10	2010	55225	580	574	109.1	616	604	179.3	578	573	102.7