

## **APPENDIX J**

### **EQUATING DRIFT ANALYSIS AND IRT PARAMETERS**

This appendix presents results from drift analysis on equating items and final IRT item parameters. Drift detection method include delta, b-b and beta analysis. Delta and b-b results are presented in both plots and tables, while beta results are presented in tables only.

Figure J-1. Delta Plot—ELA Grade 3

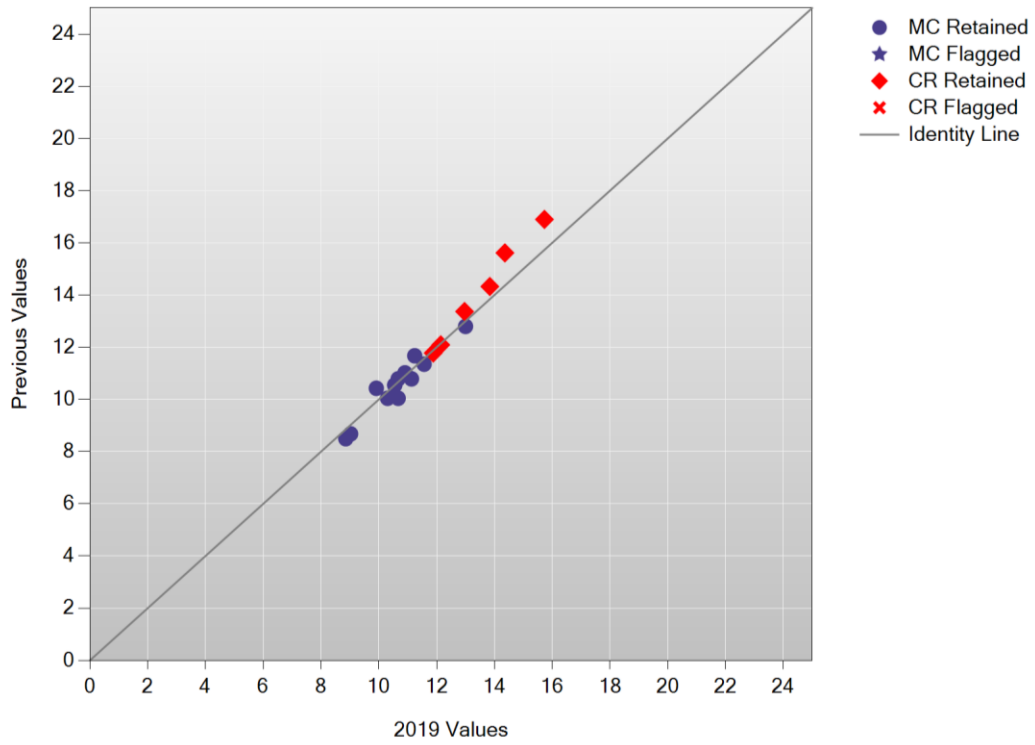


Figure J-2. b/b Plot—ELA Grade 3

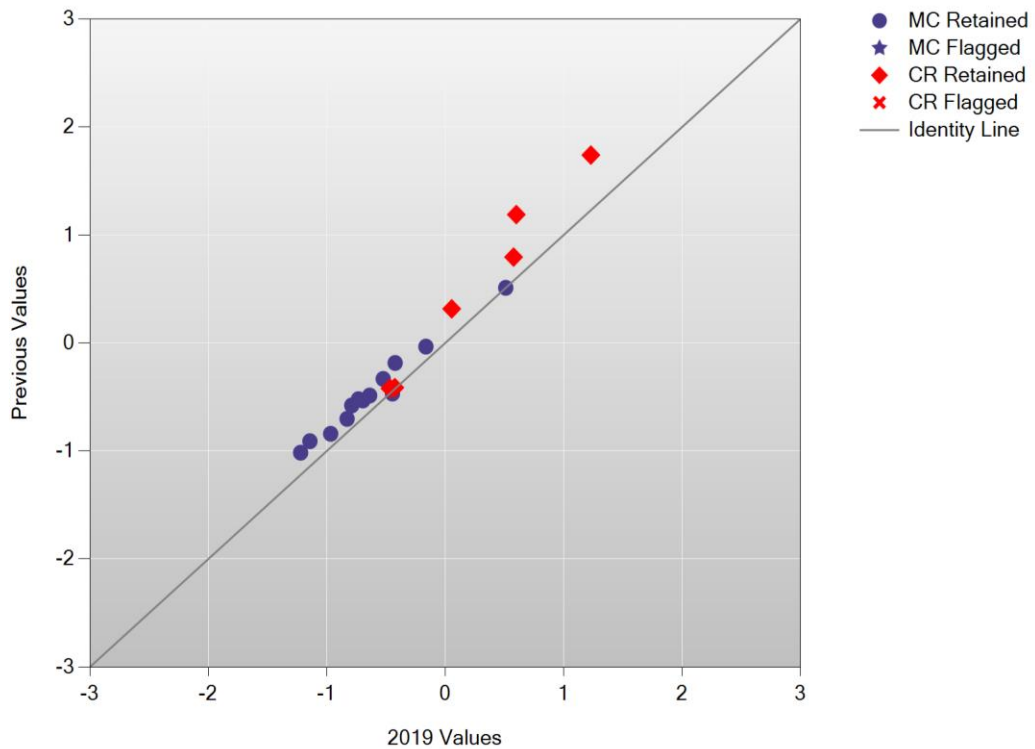


Figure J-3. Delta Plot—ELA Grade 4

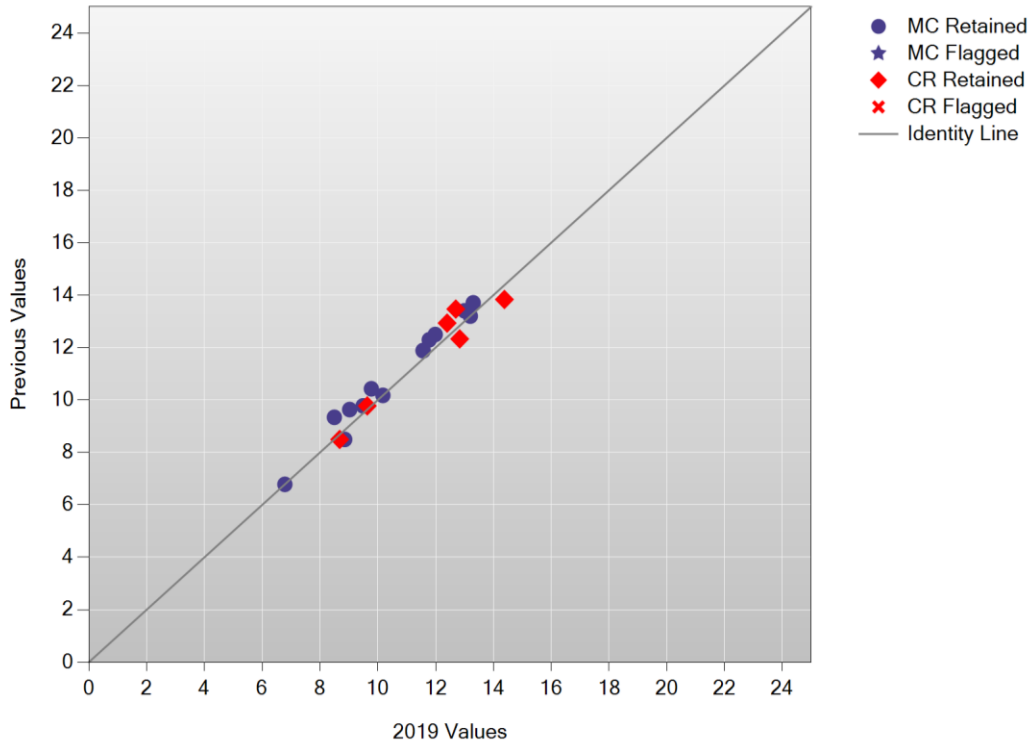


Figure J-4. b/b Plot—ELA Grade 4

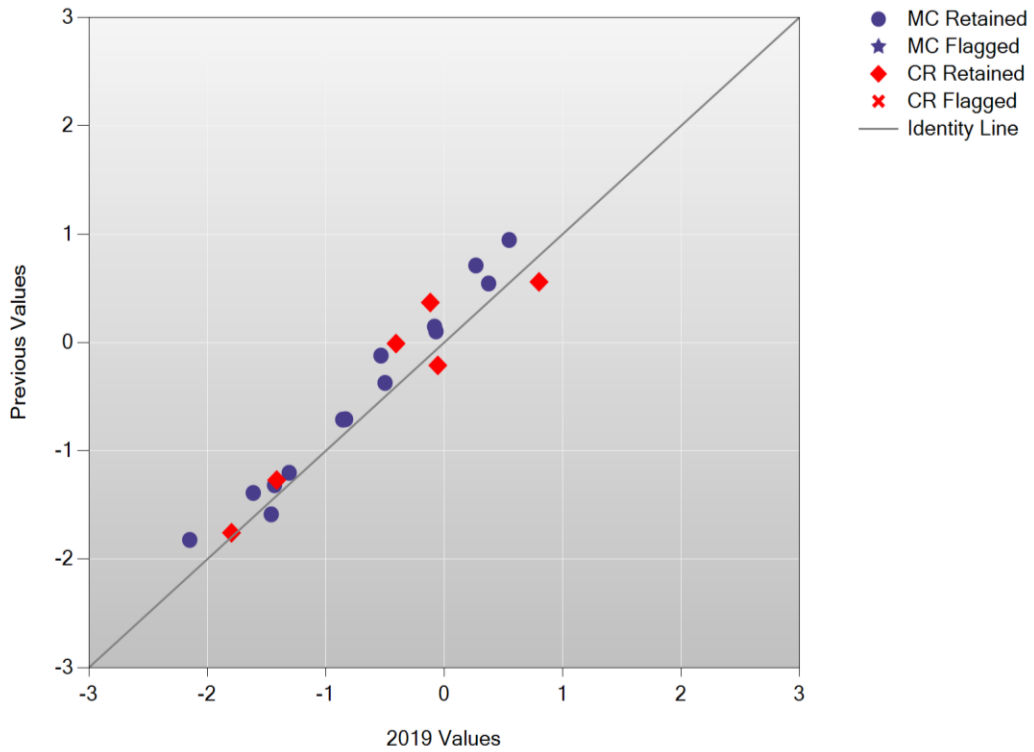


Figure J-5. Delta Plot—ELA Grade 5

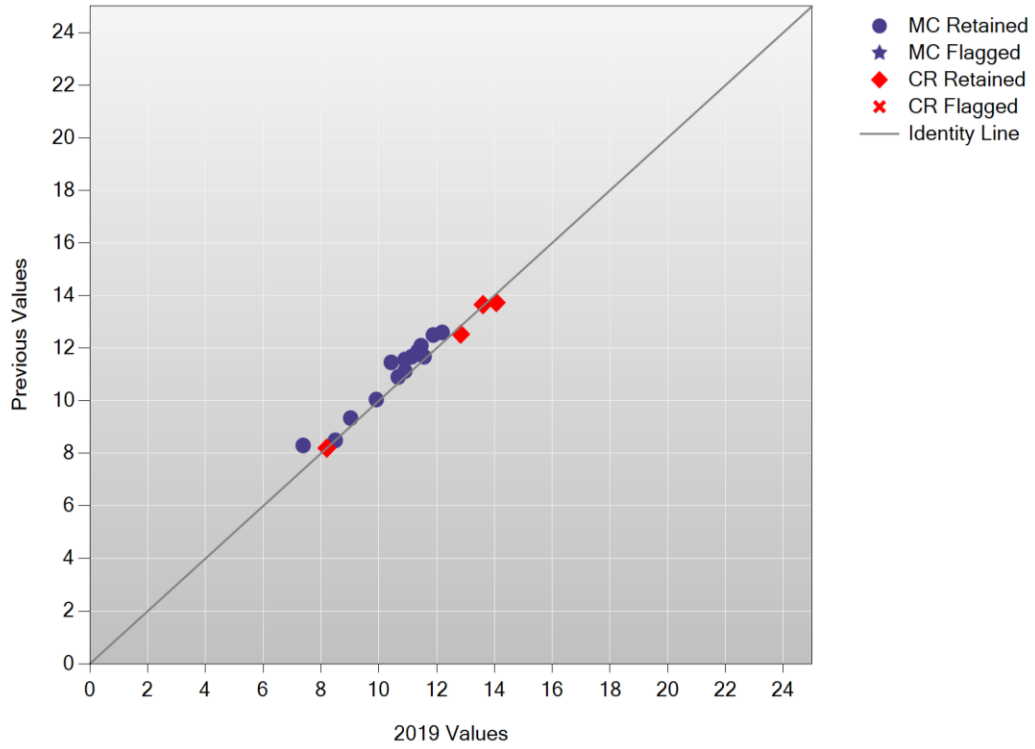


Figure J-6. b/b Plot—ELA Grade 5

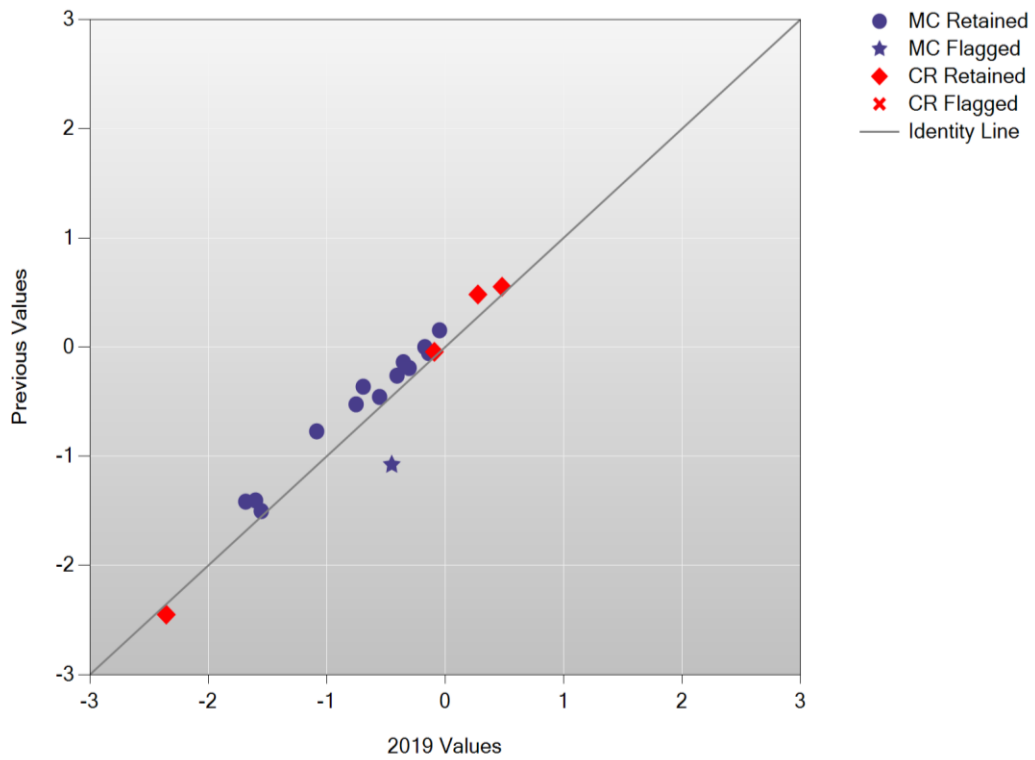


Figure J-7. Delta Plot—ELA Grade 6

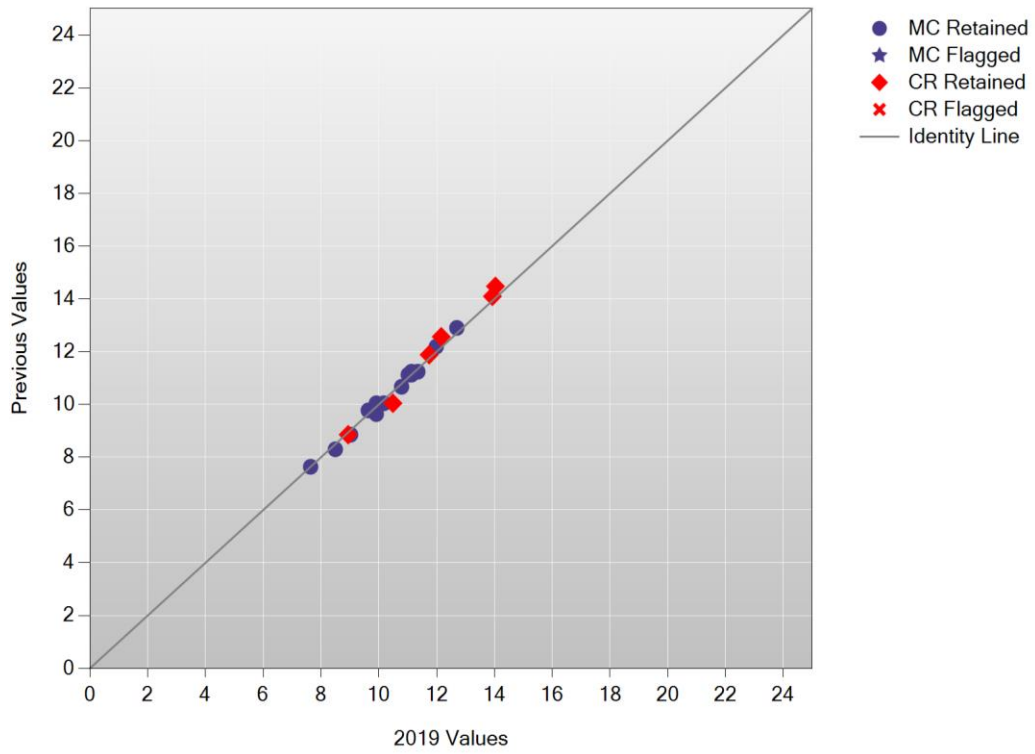


Figure J-8. b/b Plot—ELA Grade 6

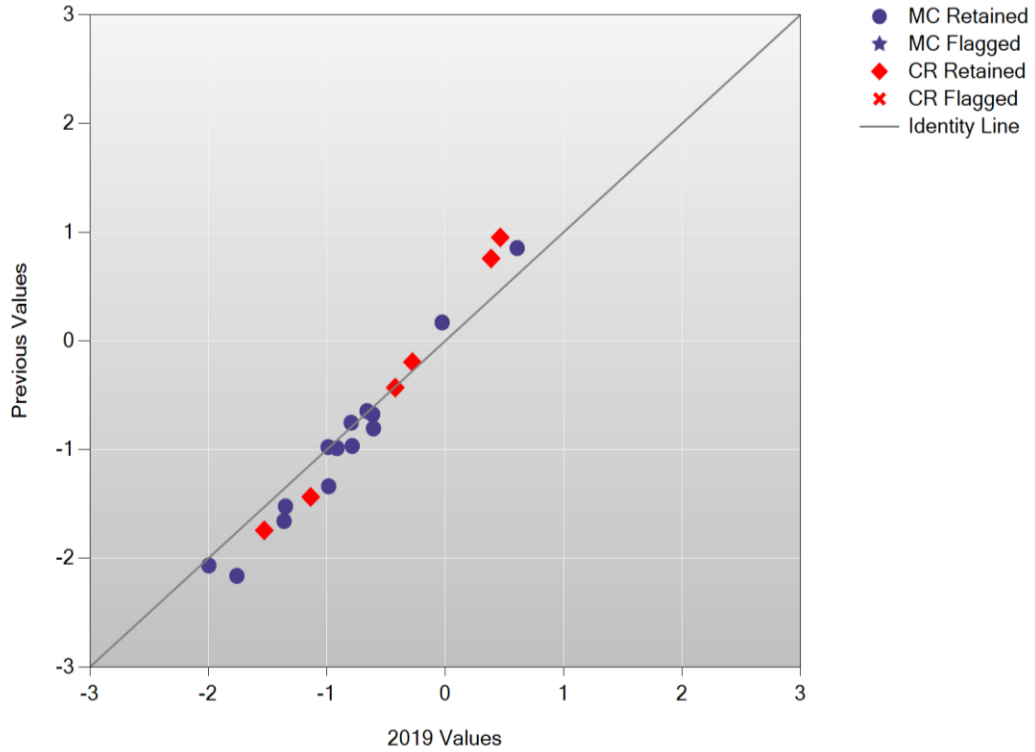


Figure J-9. Delta Plot—ELA Grade 7

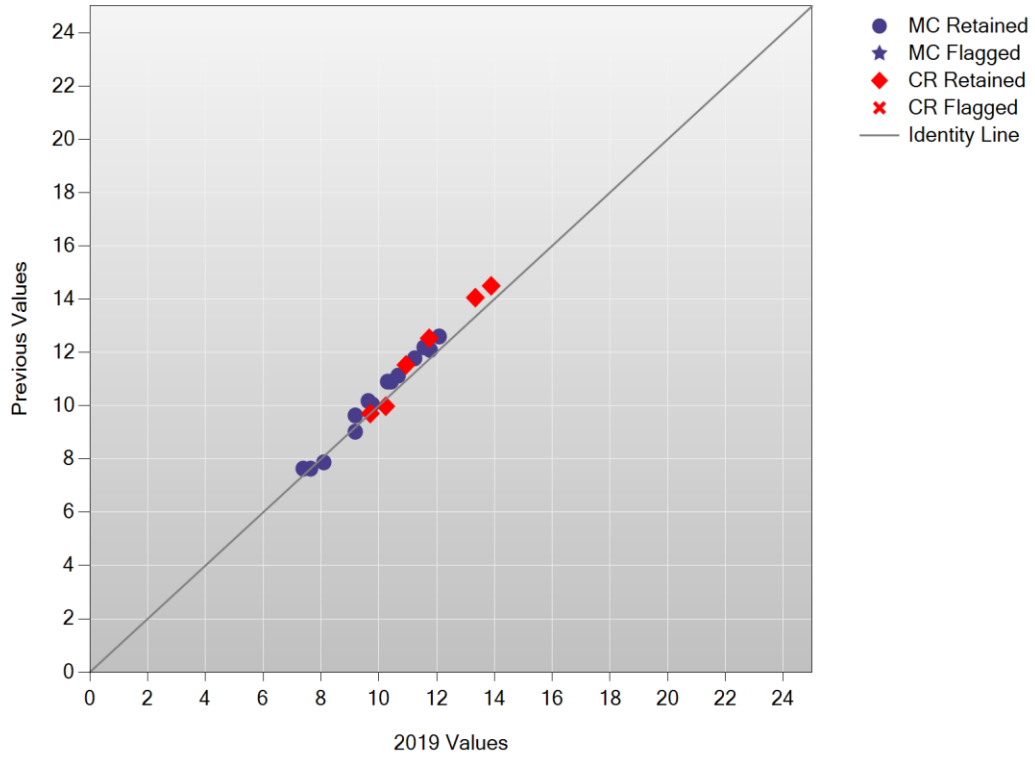


Figure J-10. b/b Plot—ELA Grade 7

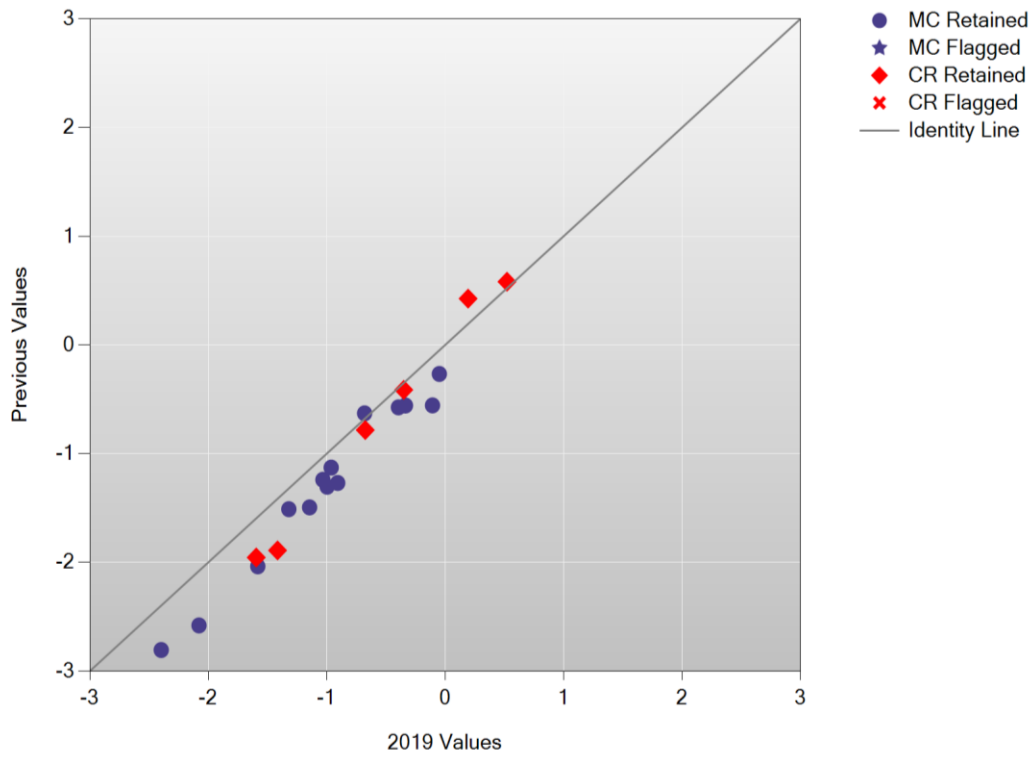


Figure J-11. Delta Plot—ELA Grade 8

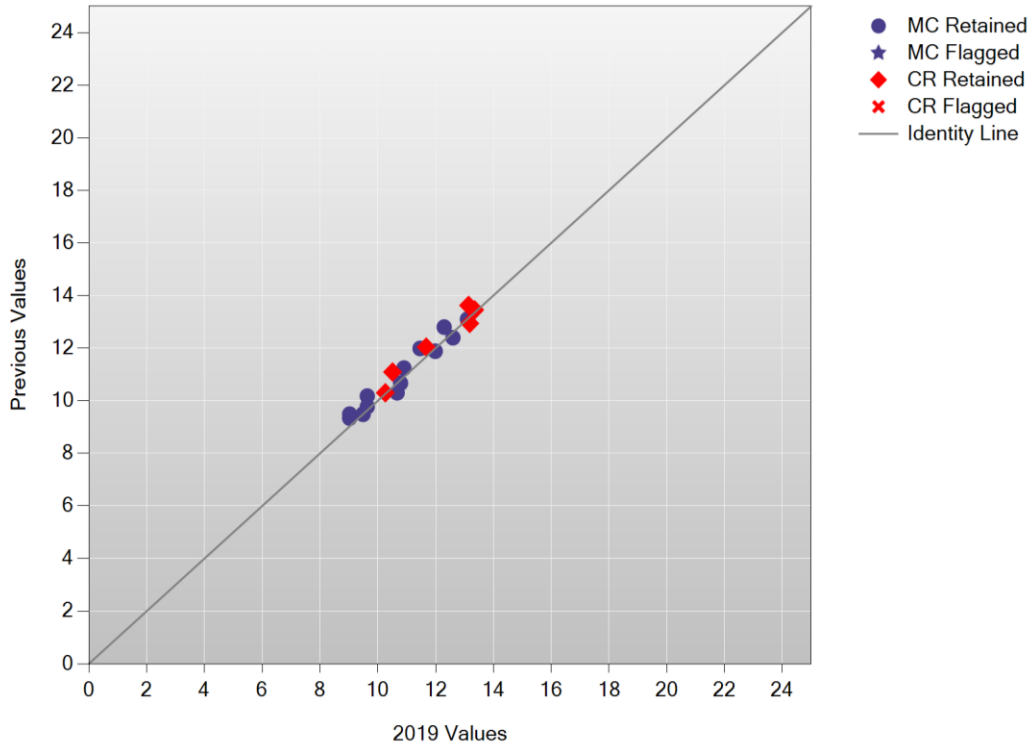




Figure J-13. Delta Plot—Mathematics Grade 3

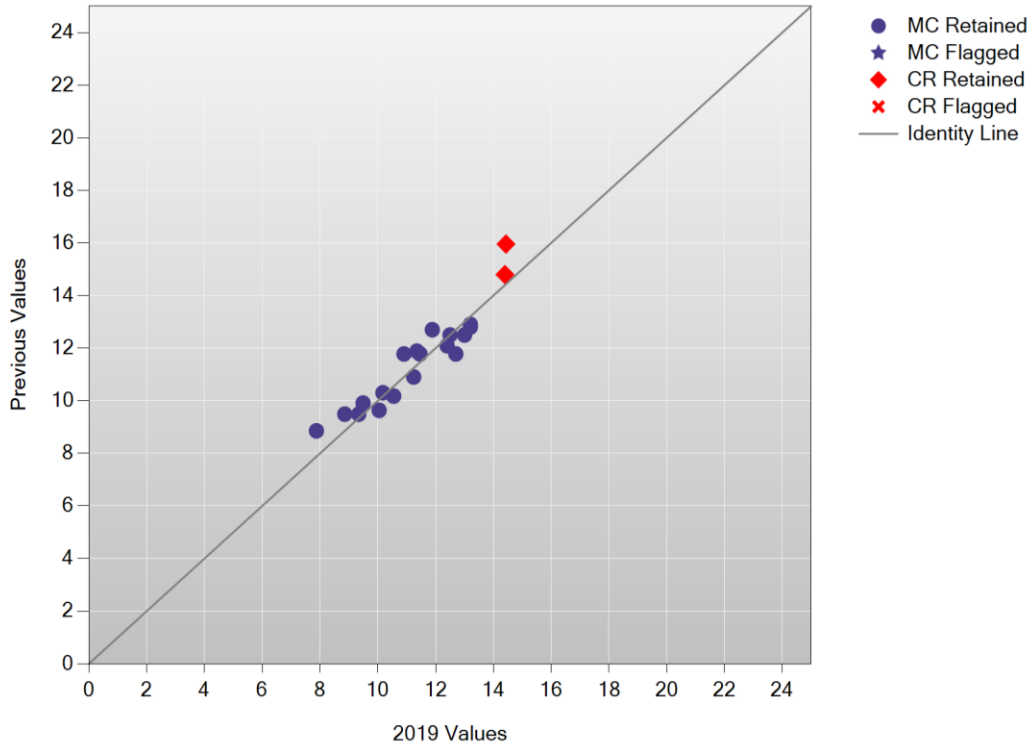


Figure J-14. b/b Plot—Mathematics Grade 3

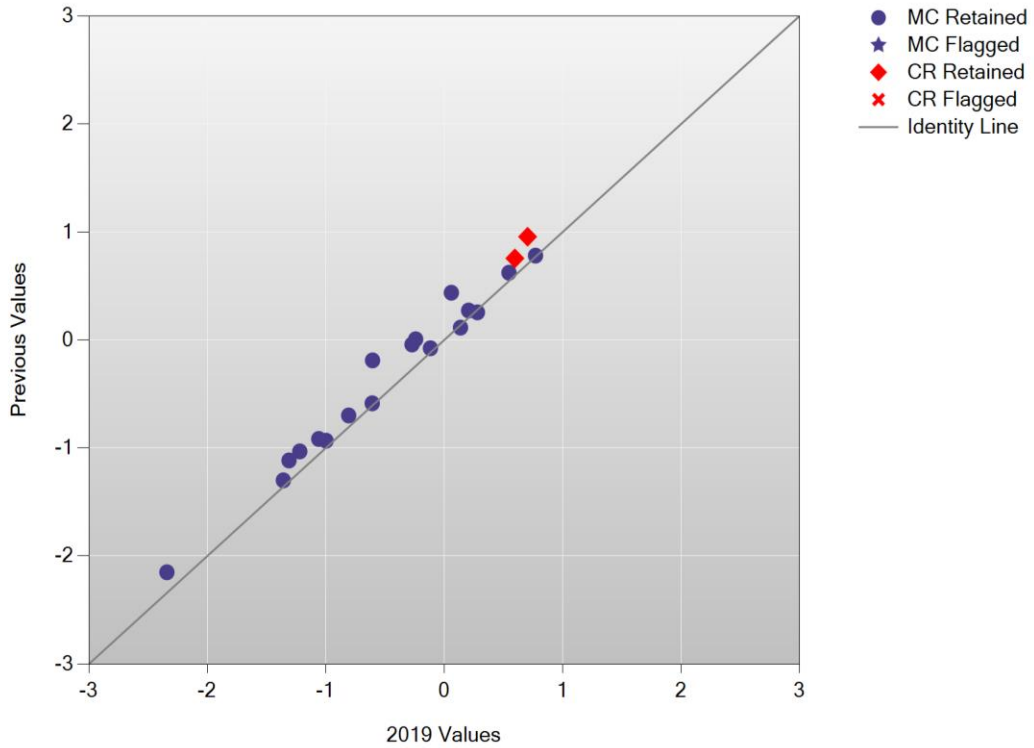


Figure J-15. Delta Plot—Mathematics Grade 4

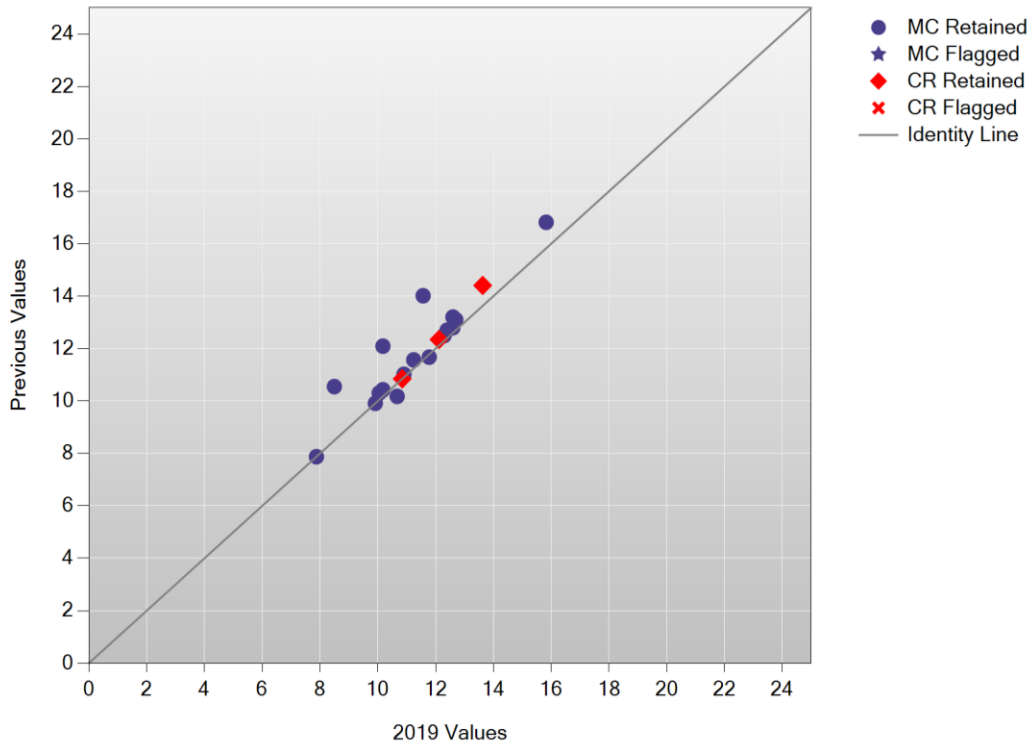


Figure J-16. b/b Plot—Mathematics Grade 4

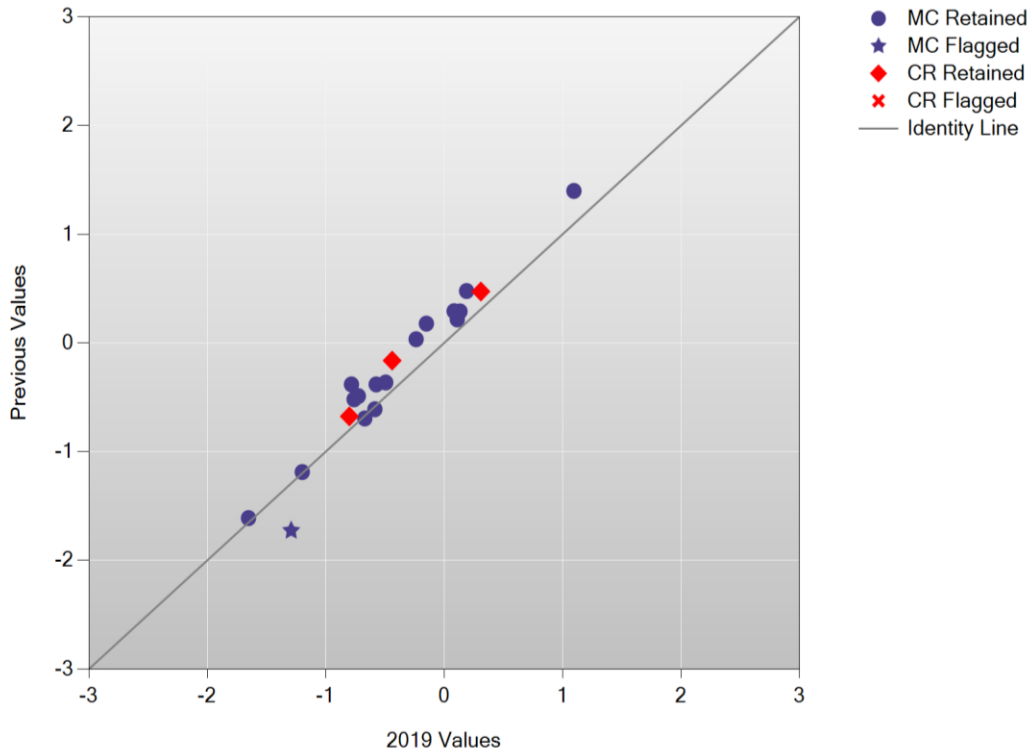


Figure J-17. Delta Plot—Mathematics Grade 5

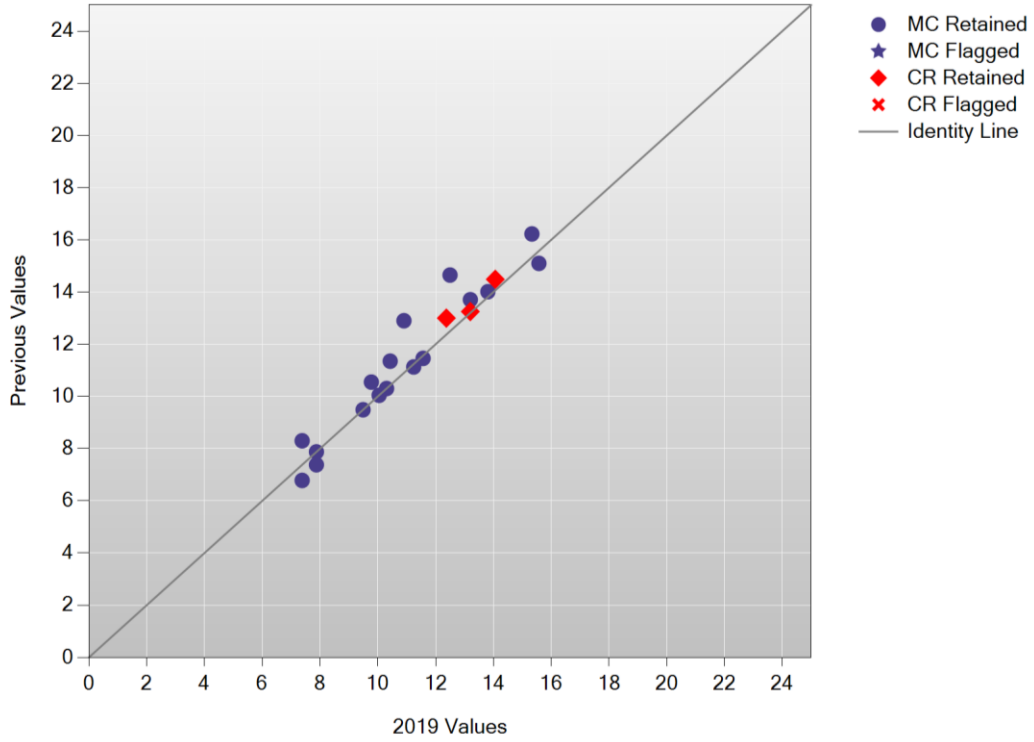


Figure J-18. b/b Plot—Mathematics Grade 5

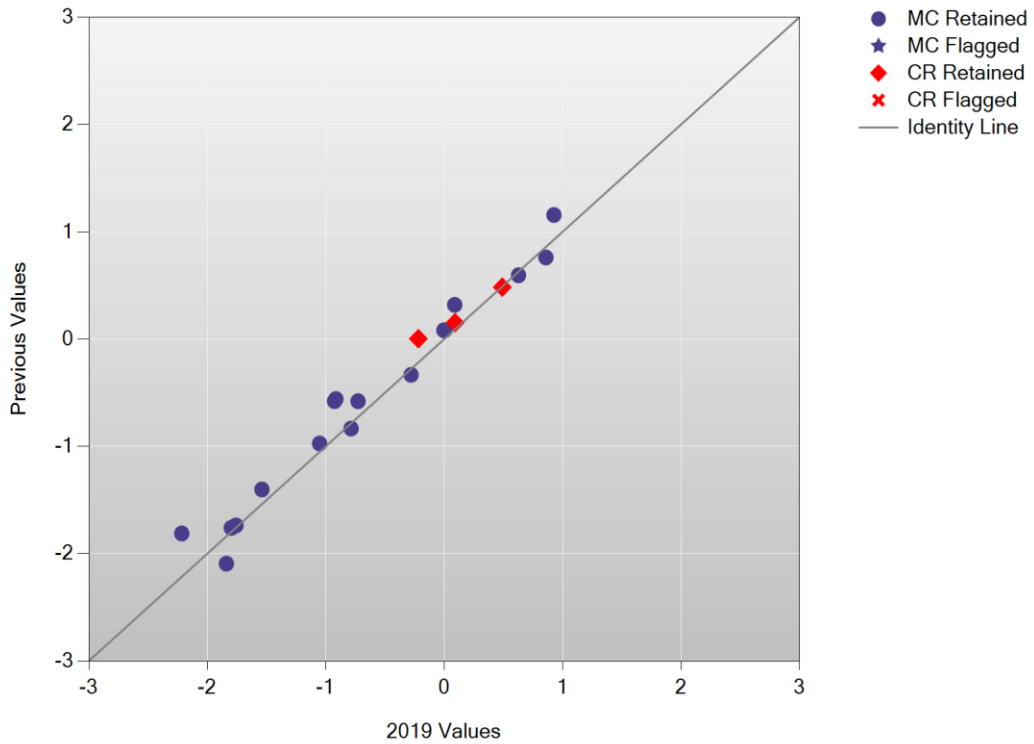


Figure J-19. Delta Plot—Mathematics Grade 6

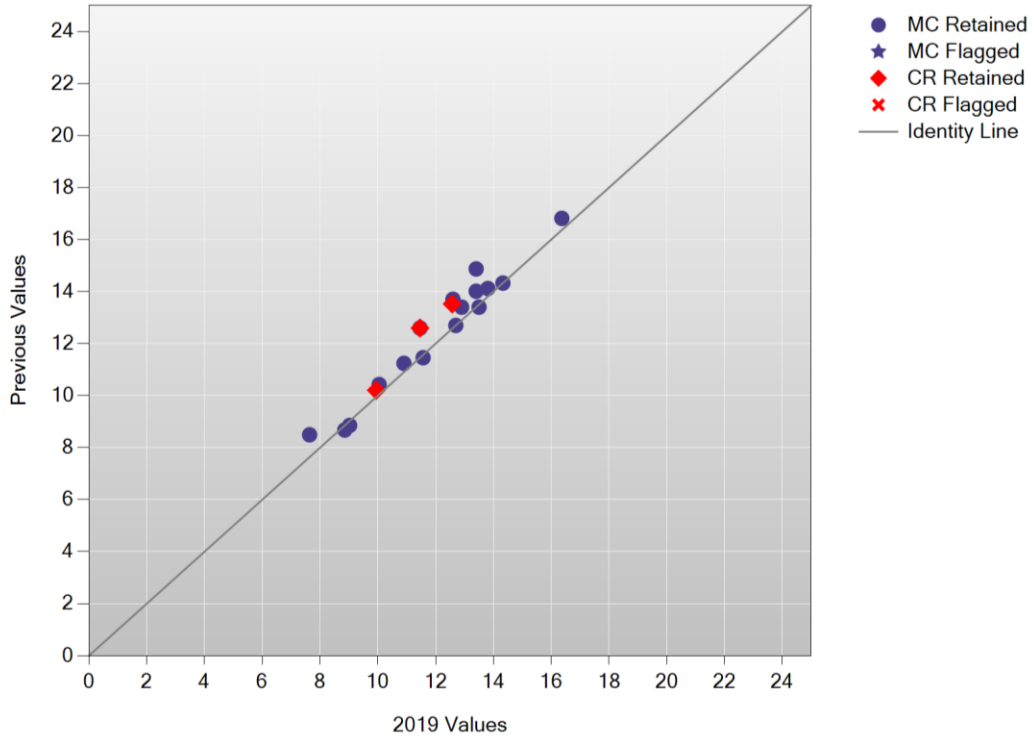


Figure J-20. b/b Plot—Mathematics Grade 6

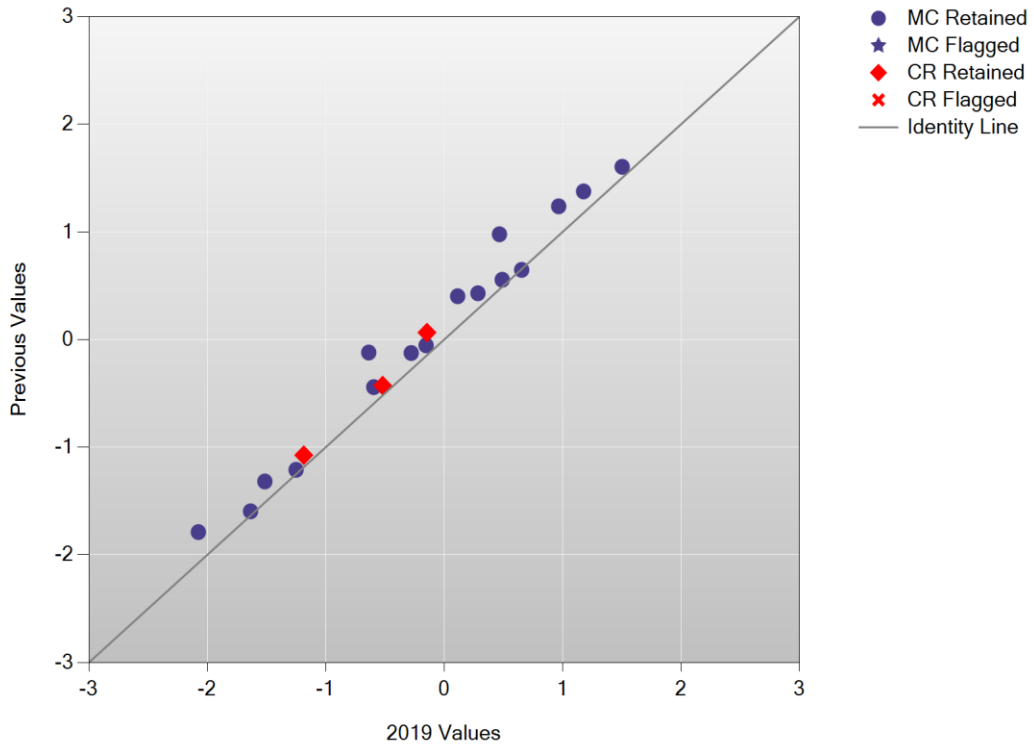


Figure J-21. Delta Plot—Mathematics Grade 7

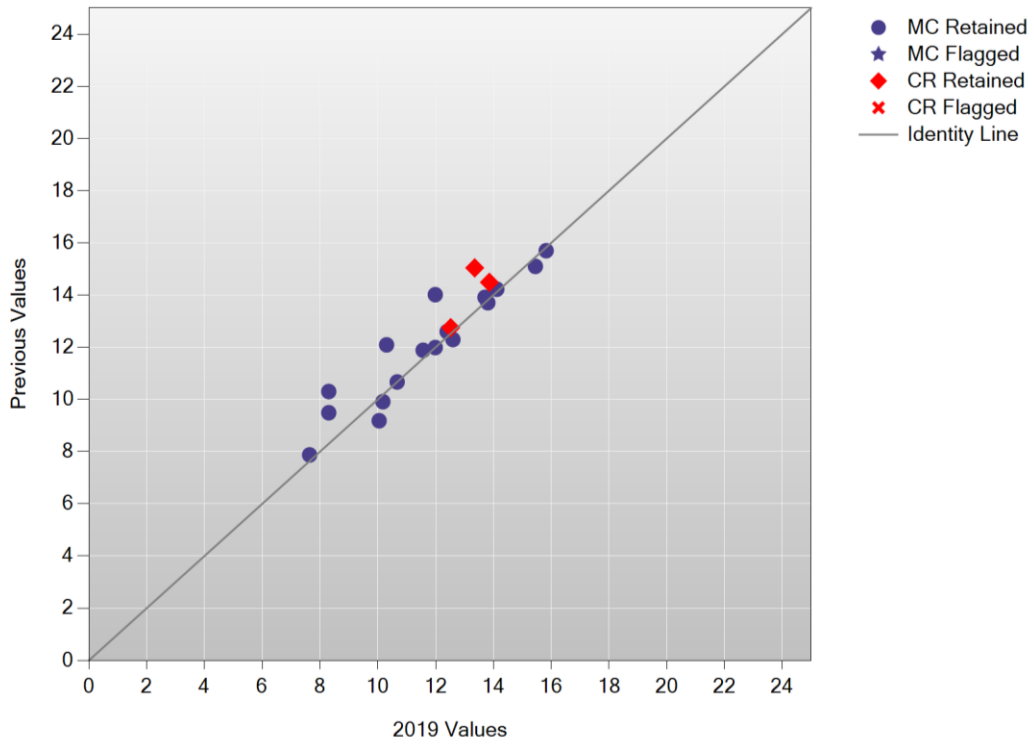


Figure J-22. b/b Plot—Mathematics Grade 7

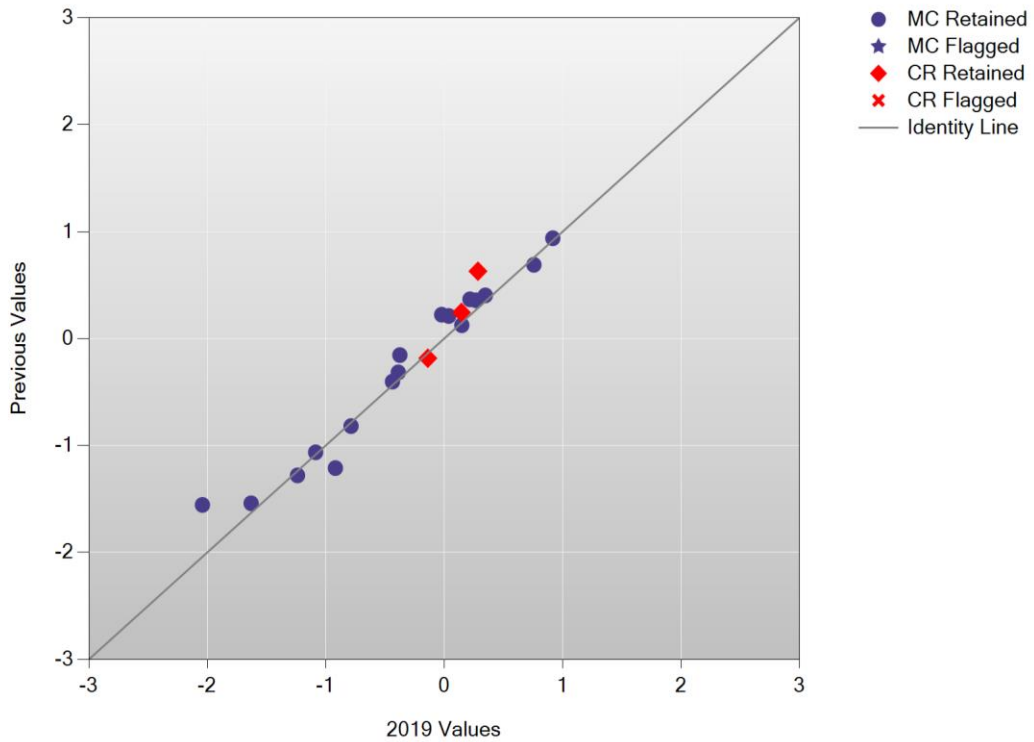


Figure J-23. Delta Plot—Mathematics Grade 8

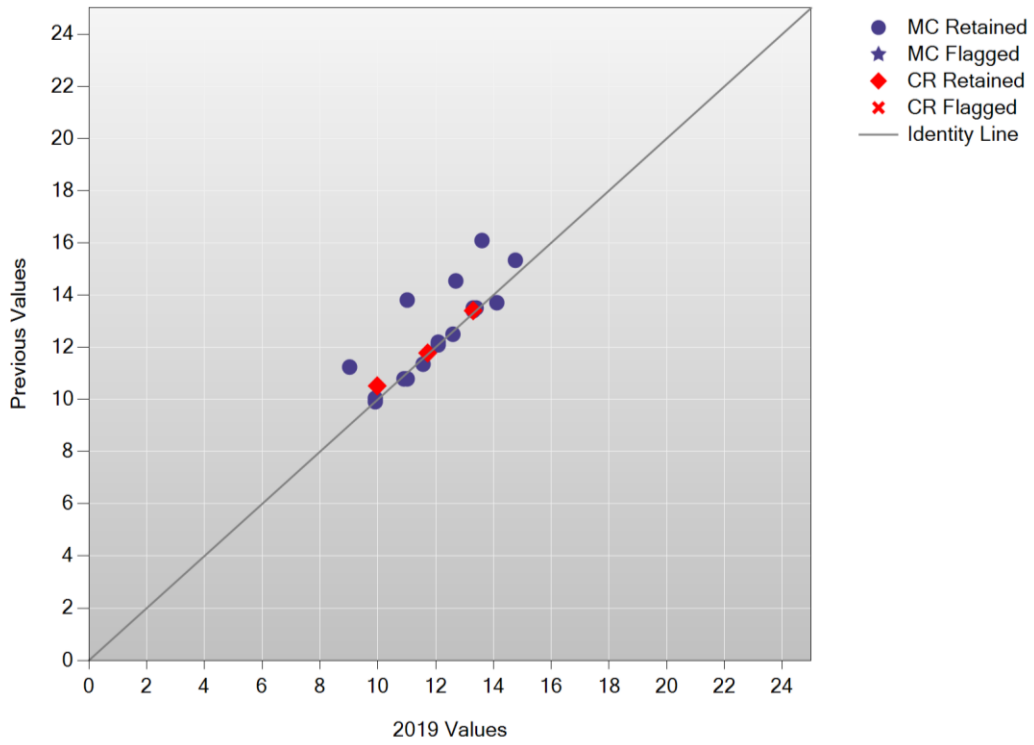
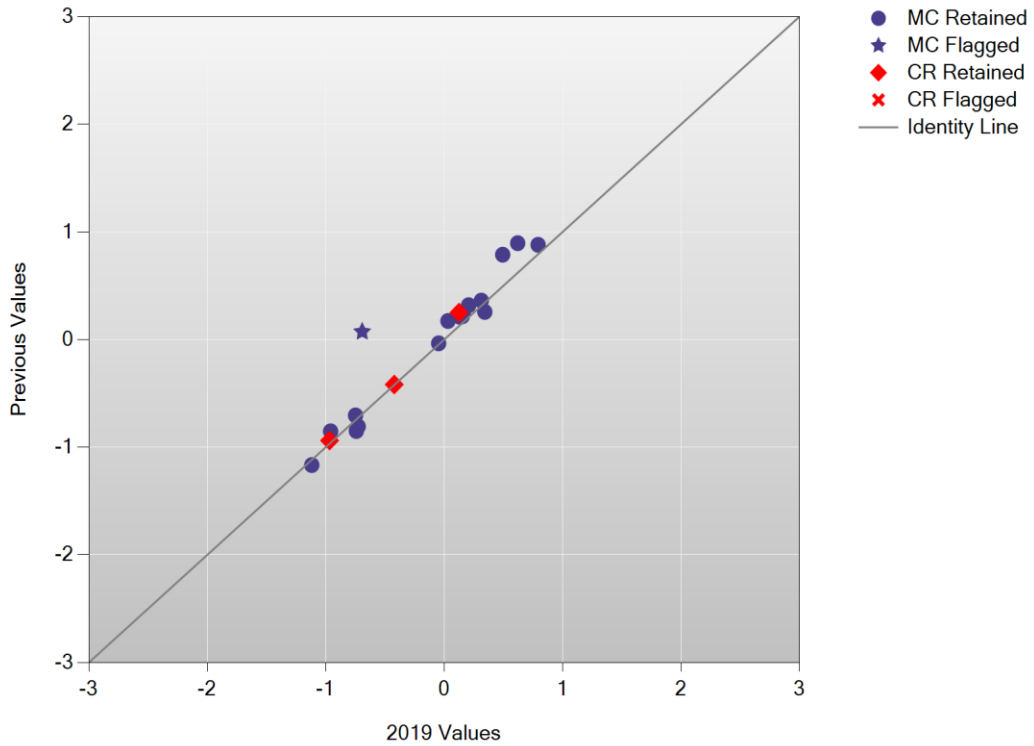


Figure J-24. b/b Plot—Mathematics Grade 8



**Table J-1. Delta Analysis—ELA Grade 3**

<i>Item Id</i>	<i>Old P</i>	<i>New P</i>	<i>Old Delta</i>	<i>New Delta</i>	<i>Max</i>	<i>Discard</i>	<i>Std Dist</i>
IA00279	0.86000	0.84000	8.67872	9.02217	1	False	-0.83629
IA00280	0.73000	0.73000	10.54875	10.54875	1	False	-0.79066
IA00281	0.66000	0.64000	11.35015	11.56616	1	False	0.22782
IA00282	0.77000	0.72000	10.04461	10.66863	1	False	1.23854
IA00283	0.71000	0.68000	10.78646	11.12920	1	False	0.37657
IA00284	0.77000	0.75000	10.04461	10.30204	1	False	-0.89450
IA00285	0.87000	0.85000	8.49444	8.85427	1	False	-0.73919
IA00287	0.46333	0.50333	13.36816	12.96658	3	False	-1.25845
IA00288	0.37000	0.41667	14.32741	13.84171	3	False	-0.74622
IA00443	0.73000	0.73000	10.54875	10.54875	1	False	-0.79066
IA00444	0.74000	0.78000	10.42662	9.91123	1	False	2.33570
IA00445	0.59000	0.58500	12.08982	12.14119	2	False	0.04221
IA00446	0.63000	0.67000	11.67259	11.24035	1	False	0.55081
IA00450	0.71000	0.72000	10.78646	10.66863	1	False	-0.35330
IA00451	0.52000	0.50000	12.89939	13.00000	1	False	1.65153
IA00452	0.62000	0.61000	11.77808	11.88272	2	False	0.02666
IA00453	0.69000	0.70000	11.01660	10.90240	1	False	-0.61472
IA00458A	0.25667	0.36667	15.61462	14.36278	3	False	1.20335
IA00458D	0.16500	0.24750	16.89646	15.72951	4	False	-0.62918

**Table J-2. Delta Analysis—ELA Grade 4**

<i>Item Id</i>	<i>Old P</i>	<i>New P</i>	<i>Old Delta</i>	<i>New Delta</i>	<i>Max</i>	<i>Discard</i>	<i>Std Dist</i>
IA00218	0.82000	0.87000	9.33854	8.49444	1	False	1.28489
IA00219	0.80000	0.84000	9.63352	9.02217	1	False	0.23766
IA00220	0.46000	0.50000	13.40173	13.00000	1	False	-0.78495
IA00221	0.55000	0.60000	12.49735	11.98661	1	False	-0.27710
IA00222	0.79000	0.81000	9.77432	9.48841	1	False	-1.22042
IA00223	0.57000	0.62000	12.29450	11.77808	1	False	-0.24709
IA00224	0.74000	0.79000	10.42662	9.77432	1	False	0.40275
IA00225	0.50667	0.56000	12.93315	12.39612	3	False	-0.16948
IA00226	0.45333	0.53000	13.46898	12.79892	3	False	0.86008
IA00289	0.61000	0.64000	11.88272	11.56616	1	False	-1.13124
IA00407	0.48000	0.48000	13.20061	13.20061	1	False	-0.37968
IA00408	0.61000	0.64000	11.88272	11.56616	1	False	-1.13124
IA00411	0.87000	0.85000	8.49444	8.85427	1	False	1.12208
IA00412	0.94000	0.94000	6.78091	6.78091	1	False	-0.52543
IA00414	0.43000	0.47000	13.70550	13.30108	1	False	-0.77986
IA00415	0.76000	0.76000	10.17479	10.17479	1	False	-0.44838
IA00416	0.79000	0.80000	9.77432	9.63352	2	False	-1.08691
IA00419	0.87000	0.86000	8.49444	8.67872	2	False	0.33732
IA00421A	0.56667	0.51667	12.32842	12.93284	3	False	1.85550
IA00421D	0.41750	0.36500	13.83317	14.38050	4	False	2.08149

**Table J-3. Delta Analysis—ELA Grade 5**

<i>Item Id</i>	<i>Old P</i>	<i>New P</i>	<i>Old Delta</i>	<i>New Delta</i>	<i>Max</i>	<i>Discard</i>	<i>Std Dist</i>
IA00209	0.65000	0.74000	11.45872	10.42662	1	False	2.22091
IA00210	0.61000	0.66000	11.88272	11.35015	1	False	-0.40809
IA00211	0.59000	0.65000	12.08982	11.45872	1	False	0.20107
IA00212	0.64000	0.70000	11.56616	10.90240	1	False	0.21841
IA00213	0.55000	0.61000	12.49735	11.88272	1	False	0.23704
IA00214	0.63000	0.68000	11.67259	11.12920	1	False	-0.41386
IA00215	0.54000	0.58000	12.59827	12.19243	1	False	-0.88562
IA00216	0.88000	0.92000	8.30005	7.37971	1	False	0.61862
IA00495	0.82000	0.84000	9.33854	9.02217	1	False	-1.18073
IA00497	0.77000	0.78000	10.04461	9.91123	1	False	-0.38934
IA00500	0.70000	0.72000	10.90240	10.66863	1	False	-1.21155
IA00502	0.87000	0.87000	8.49444	8.49444	1	False	0.83114
IA00503	0.88500	0.88500	8.19856	8.19856	2	False	0.92336
IA00506	0.63000	0.64000	11.67259	11.56616	1	False	-0.74772
IA00508	0.43500	0.44000	13.65463	13.60388	2	False	-1.05781
IA00509A	0.54667	0.51667	12.53102	12.93284	3	False	1.24131
IA00509D	0.42750	0.39500	13.73097	14.06524	4	False	1.04668
IA00638	0.68000	0.70000	11.12920	10.90240	1	False	-1.24379

**Table J-4. Delta Analysis—ELA Grade 6**

<i>Item Id</i>	<i>Old P</i>	<i>New P</i>	<i>Old Delta</i>	<i>New Delta</i>	<i>Max</i>	<i>Discard</i>	<i>Std Dist</i>
IA00173	0.85000	0.84000	8.85427	9.02217	1	False	-0.86938
IA00174	0.68000	0.68000	11.12920	11.12920	1	False	-0.74734
IA00175	0.68000	0.69000	11.12920	11.01660	1	False	-0.61759
IA00176	0.77000	0.76000	10.04461	10.17479	1	False	-0.29857
IA00177	0.91000	0.91000	7.63698	7.63698	1	False	1.03752
IA00178	0.77000	0.78000	10.04461	9.91123	1	False	0.46026
IA00179	0.67000	0.66000	11.24035	11.35015	1	False	0.45198
IA00180	0.58000	0.60000	12.19243	11.98661	1	False	-0.52559
IA00181A	0.54333	0.58333	12.56466	12.15829	3	False	1.20487
IA00181D	0.35600	0.39800	14.47669	14.03411	5	False	0.04130
IA00515	0.88000	0.87000	8.30005	8.49444	1	False	-1.04497
IA00517	0.80000	0.78000	9.63352	9.91123	1	False	0.86456
IA00518	0.72000	0.71000	10.66863	10.78646	1	False	0.07577
IA00520	0.51000	0.53000	12.99972	12.79892	1	False	-1.14212
IA00522	0.79000	0.80000	9.77432	9.63352	1	False	0.75149
IA00523	0.67000	0.68000	11.24035	11.12920	1	False	-0.72131
IA00528	0.85000	0.84500	8.85427	8.93911	2	False	-0.79439
IA00530	0.77000	0.73500	10.04461	10.48798	2	False	2.96868
IA00531A	0.61000	0.62333	11.88272	11.74301	3	False	-0.94630
IA00531D	0.39200	0.40800	14.09644	13.93077	5	False	-0.04887



**Table J-5. Delta Analysis—ELA Grade 7**

<i>Item Id</i>	<i>Old P</i>	<i>New P</i>	<i>Old Delta</i>	<i>New Delta</i>	<i>Max</i>	<i>Discard</i>	<i>Std Dist</i>
IA00065	0.80000	0.83000	9.63352	9.18334	1	False	0.43375
IA00066	0.70000	0.74000	10.90240	10.42662	1	False	-0.51251
IA00067	0.54000	0.59000	12.59827	12.08982	1	False	-0.95758
IA00068	0.76000	0.80000	10.17479	9.63352	1	False	0.66537
IA00069	0.62000	0.67000	11.77808	11.24035	1	False	-0.81469
IA00070	0.59000	0.62000	12.08982	11.77808	1	False	0.14051
IA00071A	0.54667	0.62333	12.53102	11.74301	3	False	0.48652
IA00071D	0.35400	0.41200	14.49817	13.88961	5	False	-0.03025
IA00081	0.70000	0.75000	10.90240	10.30204	1	False	0.47457
IA00082	0.58000	0.64000	12.19243	11.56616	1	False	-0.48846
IA00257	0.90000	0.89000	7.87379	8.09389	1	False	0.53634
IA00258	0.79500	0.79500	9.70443	9.70443	2	False	0.45031
IA00262	0.68000	0.72000	11.12920	10.66863	1	False	-0.83841
IA00265	0.91000	0.92000	7.63698	7.37971	1	False	0.71335
IA00269	0.91000	0.91000	7.63698	7.63698	1	False	-1.32507
IA00655	0.77000	0.79000	10.04461	9.77432	1	False	-1.36379
IA00657	0.84000	0.83000	9.02217	9.18334	1	False	1.10946
IA00658	0.77500	0.75500	9.97834	10.23876	2	False	2.86182
IA00665A	0.64333	0.69667	11.53047	10.94065	3	False	-0.17773
IA00665D	0.39600	0.46600	14.05486	13.34132	5	False	-1.26353

**Table J-6. Delta Analysis—ELA Grade 8**

<i>Item Id</i>	<i>Old P</i>	<i>New P</i>	<i>Old Delta</i>	<i>New Delta</i>	<i>Max</i>	<i>Discard</i>	<i>Std Dist</i>
IA00056	0.82000	0.84000	9.33854	9.02217	1	False	-1.12507
IA00057	0.79000	0.80000	9.77432	9.63352	1	False	-1.53442
IA00058	0.76000	0.80000	10.17479	9.63352	1	False	0.67753
IA00059	0.67000	0.70000	11.24035	10.90240	1	False	-0.69646
IA00060	0.81000	0.84000	9.48841	9.02217	1	False	0.01900
IA00061	0.60000	0.65000	11.98661	11.45872	1	False	0.83155
IA00062	0.52000	0.57000	12.89939	12.29450	1	False	0.77319
IA00063	0.49000	0.49000	13.10028	13.10028	1	False	-0.94618
IA00064A	0.68333	0.73333	11.09184	10.50830	3	False	1.12294
IA00064D	0.43800	0.48600	13.62417	13.14040	5	False	0.73073
IA00368	0.81000	0.81000	9.48841	9.48841	1	False	-0.43926
IA00371	0.59500	0.63000	12.03830	11.67259	2	False	-0.37646
IA00373	0.45500	0.46500	13.45215	13.35138	2	False	-1.75068
IA00374	0.75000	0.72000	10.30204	10.66863	1	False	2.19347
IA00376A	0.75000	0.75333	10.30204	10.25993	3	False	-0.86898
IA00376D	0.50600	0.48200	12.93984	13.18054	5	False	0.87993
IA00378	0.61000	0.60000	11.88272	11.98661	1	False	0.00314
IA00379	0.56000	0.54000	12.39612	12.59827	1	False	0.66732
IA00383	0.72000	0.71000	10.66863	10.78646	1	False	0.27799
IA00699	0.81000	0.81000	9.48841	9.48841	1	False	-0.43926

**Table J-7. Delta Analysis—Mathematics Grade 3**

<i>Item Id</i>	<i>Old P</i>	<i>New P</i>	<i>Old Delta</i>	<i>New Delta</i>	<i>Max</i>	<i>Discard</i>	<i>Std Dist</i>
IA00769	0.85000	0.90000	8.85427	7.87379	1	False	0.97731
IA00799	0.59000	0.56000	12.08982	12.39612	1	False	-0.10410
IA00805	0.55000	0.55000	12.49735	12.49735	1	False	-1.01788
IA00811	0.53000	0.61000	12.79892	11.88272	1	False	0.44017
IA00834	0.81000	0.85000	9.48841	8.85427	1	False	-0.06854
IA00838	0.81000	0.82000	9.48841	9.33854	1	False	-1.50215
IA00850	0.80000	0.77000	9.63352	10.04461	1	False	0.18169
IA00852	0.62000	0.70000	11.77808	10.90240	1	False	0.62921
IA00854	0.61000	0.66000	11.88272	11.35015	1	False	-0.40085
IA00857	0.76000	0.73000	10.17479	10.54875	1	False	0.07659
IA00916	0.51000	0.48000	12.99972	13.20061	1	False	-0.11095
IA00924	0.55000	0.50000	12.49735	13.00000	1	False	0.48938
IA00930	0.70000	0.67000	10.90240	11.24035	1	False	-0.02296
IA00932	0.52000	0.48000	12.89939	13.20061	1	False	0.18877
IA00993	0.62000	0.65000	11.77808	11.45872	1	False	-1.03901
IA00994	0.62000	0.53000	11.77808	12.79892	1	False	1.73508
IA01019	0.78000	0.81000	9.91123	9.48841	1	False	-0.70716
IA01071	0.75000	0.76000	10.30204	10.17479	1	False	-1.42489
IA01080	0.23000	0.36000	15.95539	14.43384	3	False	2.51757
IA01081	0.32667	0.36333	14.79655	14.39825	3	False	-0.83727

**Table J-8. Delta Analysis—Mathematics Grade 4**

<i>Item Id</i>	<i>Old P</i>	<i>New P</i>	<i>Old Delta</i>	<i>New Delta</i>	<i>Max</i>	<i>Discard</i>	<i>Std Dist</i>
IA00779	0.90000	0.90000	7.87379	7.87379	1	False	-0.60797
IA00789	0.36250	0.43750	14.40714	13.62924	4	False	-0.86393
IA00837	0.48000	0.54000	13.20061	12.59827	1	False	-0.86309
IA00839	0.63000	0.62000	11.67259	11.77808	1	False	0.23926
IA00841	0.78000	0.78000	9.91123	9.91123	1	False	-0.26239
IA00861	0.73000	0.87000	10.54875	8.49444	1	False	2.24568
IA00869	0.17000	0.24000	16.81666	15.82521	1	False	-0.86184
IA00906	0.74000	0.76000	10.42662	10.17479	1	False	-0.65937
IA00912	0.76000	0.72000	10.17479	10.66863	1	False	0.73222
IA00956	0.49000	0.53000	13.10028	12.79892	1	False	-0.49350
IA00958	0.55000	0.57000	12.49735	12.29450	1	False	-0.21394
IA00961	0.52000	0.54000	12.89939	12.59827	1	False	-0.15938
IA00963	0.59000	0.76000	12.08982	10.17479	1	False	1.71639
IA00969	0.75000	0.77000	10.30204	10.04461	1	False	-0.69127
IA01048	0.53000	0.56000	12.79892	12.39612	1	False	-0.37200
IA01049	0.69000	0.70000	11.01660	10.90240	1	False	-0.29457
IA01055	0.40000	0.64000	14.01339	11.56616	1	False	2.41380
IA01057	0.56500	0.58750	12.34537	12.11553	4	False	-0.29163
IA01088	0.64000	0.67000	11.56616	11.24035	1	False	-0.60840
IA01093	0.70500	0.70500	10.84466	10.84466	2	False	-0.10407

**Table J-9. Delta Analysis—Mathematics Grade 5**

<i>Item Id</i>	<i>Old P</i>	<i>New P</i>	<i>Old Delta</i>	<i>New Delta</i>	<i>Max</i>	<i>Discard</i>	<i>Std Dist</i>
IA00771	0.81000	0.81000	9.48841	9.48841	1	False	-0.70428
IA00776	0.51000	0.70000	12.99972	10.90240	1	False	2.30394
IA00803	0.75000	0.75000	10.30204	10.30204	1	False	-0.54696
IA00806	0.34000	0.55000	14.64985	12.49735	1	False	2.32570
IA00826	0.92000	0.90000	7.37971	7.87379	1	False	0.03474
IA00872	0.65000	0.64000	11.45872	11.56616	1	False	-0.07393
IA00880	0.21000	0.28000	16.22568	15.33137	1	False	-0.89922
IA00885	0.73000	0.79000	10.54875	9.77432	1	False	-0.07981
IA00936	0.77000	0.77000	10.04461	10.04461	1	False	-0.59674
IA00941	0.94000	0.92000	6.78091	7.37971	1	False	0.16203
IA00943	0.68000	0.67000	11.12920	11.24035	1	False	-0.12906
IA00989	0.90000	0.90000	7.87379	7.87379	1	False	-1.01648
IA01020	0.40000	0.42000	14.01339	13.80757	1	False	-0.30704
IA01027	0.66000	0.74000	11.35015	10.42662	1	False	0.11129
IA01028	0.30000	0.26000	15.09760	15.57338	1	False	1.48457
IA01029	0.88000	0.92000	8.30005	7.37971	1	False	0.69364
IA01030	0.50000	0.56250	13.00000	12.37076	4	False	-0.89076
IA01032	0.35500	0.39500	14.48742	14.06524	4	False	-0.71757
IA01149	0.43000	0.48000	13.70550	13.20061	1	False	-1.06071
IA01155	0.47500	0.48000	13.25083	13.20061	2	False	-0.09334

**Table J-10. Delta Analysis—Mathematics Grade 6**

<i>Item Id</i>	<i>Old P</i>	<i>New P</i>	<i>Old Delta</i>	<i>New Delta</i>	<i>Max</i>	<i>Discard</i>	<i>Std Dist</i>
IA00777	0.86000	0.85000	8.67872	8.85427	1	False	0.21410
IA00778	0.85000	0.84000	8.85427	9.02217	1	False	0.21933
IA00782	0.54000	0.65000	12.59827	11.45872	1	False	0.99091
IA00804	0.74000	0.77000	10.42662	10.04461	1	False	-1.53196
IA00818	0.46000	0.45000	13.40173	13.50265	1	False	0.86599
IA00819	0.43000	0.54000	13.70550	12.59827	1	False	0.64368
IA00827	0.67000	0.70000	11.24035	10.90240	1	False	-1.27842
IA00845	0.65000	0.64000	11.45872	11.56616	1	False	0.50348
IA00881	0.44750	0.54250	13.52792	12.57306	4	False	0.08445
IA00884	0.17000	0.20000	16.81666	16.36648	1	False	-0.60285
IA00899	0.37000	0.37000	14.32741	14.32741	1	False	0.65701
IA00972	0.75750	0.77750	10.20687	9.94489	4	False	-1.18830
IA00975	0.32000	0.46000	14.87080	13.40173	1	False	1.82312
IA00992	0.39000	0.42000	14.11728	13.80757	1	False	-0.59367
IA01058	0.53000	0.53000	12.79892	12.79892	1	False	0.33180
IA01063	0.40000	0.46000	14.01339	13.40173	1	False	-1.35196
IA01064	0.46000	0.51000	13.40173	12.99972	1	False	-1.48710
IA01117	0.87000	0.91000	8.49444	7.63698	1	False	0.70948
IA01131	0.54000	0.65000	12.59827	11.45872	2	False	0.99091

**Table J-11. Delta Analysis—Mathematics Grade 7**

<i>Item Id</i>	<i>Old P</i>	<i>New P</i>	<i>Old Delta</i>	<i>New Delta</i>	<i>Max</i>	<i>Discard</i>	<i>Std Dist</i>
IA00796	0.54000	0.56000	12.59827	12.39612	1	False	-0.91955
IA00831	0.78000	0.76000	9.91123	10.17479	1	False	0.26319
IA00847	0.60000	0.60000	11.98661	11.98661	1	False	-0.45979
IA00878	0.35500	0.41500	14.48742	13.85881	4	False	-0.74930
IA00907	0.72000	0.72000	10.66863	10.66863	1	False	-0.33239
IA00909	0.90000	0.91000	7.87379	7.63698	1	False	-0.53157
IA00910	0.43000	0.42000	13.70550	13.80757	1	False	-0.42364
IA00945	0.59000	0.75000	12.08982	10.30204	1	False	1.31632
IA00948	0.81000	0.88000	9.48841	8.30005	1	False	-0.12316
IA00949	0.40000	0.60000	14.01339	11.98661	1	False	1.97594
IA01004	0.25000	0.24000	15.69796	15.82521	1	False	-0.56635
IA01006	0.75000	0.88000	10.30204	8.30005	1	False	1.56805
IA01011	0.57000	0.54000	12.29450	12.59827	1	False	0.11248
IA01016	0.61000	0.64000	11.88272	11.56616	1	False	-1.07715
IA01017	0.83000	0.77000	9.18334	10.04461	1	False	1.51818
IA01018	0.41000	0.43000	13.91018	13.70550	1	False	-1.05141
IA01069	0.52500	0.54750	12.84917	12.52261	4	False	-0.98254
IA01097	0.38000	0.39000	14.22192	14.11728	1	False	-0.88328
IA01100	0.30000	0.27000	15.09760	15.45125	1	False	-0.05961
IA01108	0.30500	0.46500	15.04029	13.35138	2	False	1.40559

**Table J-12. Delta Analysis—Mathematics Grade 8**

<i>Item Id</i>	<i>Old P</i>	<i>New P</i>	<i>Old Delta</i>	<i>New Delta</i>	<i>Max</i>	<i>Discard</i>	<i>Std Dist</i>
IA00774	0.77000	0.78000	10.04461	9.91123	1	False	-1.05702
IA00849	0.71000	0.70000	10.78646	10.90240	1	False	-0.46761
IA00858	0.67000	0.84000	11.24035	9.02217	1	False	2.05740
IA00864	0.73250	0.77500	10.51843	9.97834	4	False	-0.77560
IA00865	0.55000	0.54000	12.49735	12.59827	1	False	-0.15476
IA00866	0.22000	0.44000	16.08877	13.60388	1	False	1.56834
IA00897	0.43000	0.39000	13.70550	14.11728	1	False	0.63634
IA00903	0.78000	0.78000	9.91123	9.91123	1	False	-0.84692
IA00905	0.35000	0.53000	14.54128	12.79892	1	False	0.73582
IA00979	0.58000	0.59000	12.19243	12.08982	1	False	-0.57622
IA00980	0.46000	0.47000	13.40173	13.30108	1	False	-0.33279
IA00985	0.59000	0.59000	12.08982	12.08982	1	False	-0.41460
IA00986	0.45000	0.47000	13.50265	13.30108	1	False	-0.49174
IA01033	0.66000	0.64000	11.35015	11.56616	1	False	-0.17825
IA01037	0.45000	0.46000	13.50265	13.40173	1	False	-0.31322
IA01042	0.42000	0.69000	13.80757	11.01660	1	False	2.56388
IA01044	0.71000	0.69000	10.78646	11.01660	1	False	-0.26507
IA01066	0.62000	0.62500	11.77808	11.72544	4	False	-0.56982
IA01113	0.28000	0.33000	15.33137	14.75965	1	False	-0.78535
IA01125	0.46000	0.47000	13.40173	13.30108	2	False	-0.33279

**Table J-13. b/b Analysis—ELA Grade 3**

<i>Item Id</i>	<i>Old b</i>	<i>New b</i>	<i>Std Dist</i>	<i>Flag</i>
IA00279	-0.90884	-1.14240	0.51331	False
IA00280	-0.57740	-0.78890	-0.25714	False
IA00281	-0.03264	-0.16270	-0.21158	False
IA00282	-0.70169	-0.82870	-1.15413	False
IA00283	-0.33186	-0.52340	-0.87449	False
IA00284	-0.53117	-0.69470	-0.94268	False
IA00285	-0.84018	-0.96690	-0.96320	False
IA00287	0.31708	0.05520	-0.92105	False
IA00288	0.79657	0.57777	-0.13745	False
IA00443	-1.01491	-1.22070	0.31137	False
IA00444	-0.51981	-0.73230	-0.32891	False
IA00445	-0.41256	-0.42540	0.74031	False
IA00446	-0.18416	-0.42260	-0.48732	False
IA00450	-0.46761	-0.44530	1.11214	False
IA00451	0.51202	0.51130	2.25318	False
IA00452	-0.41962	-0.46635	0.29355	False
IA00453	-0.48573	-0.63780	-1.15693	False
IA00458A	1.19028	0.60050	2.01983	False
IA00458D	1.74126	1.23070	0.19117	False

**Table J-14. b/b Analysis—ELA Grade 4**

<i>Item Id</i>	<i>Old b</i>	<i>New b</i>	<i>Std Dist</i>	<i>Flag</i>
IA00218	-1.38833	-1.61230	-0.41314	False
IA00219	-1.58588	-1.46050	0.89144	False
IA00220	0.71169	0.26790	0.60162	False
IA00221	0.14675	-0.08140	-0.89315	False
IA00222	-1.20223	-1.30880	-0.79120	False
IA00223	0.10303	-0.06930	-0.86867	False
IA00224	-0.71144	-0.85710	-0.93246	False
IA00225	-0.00922	-0.40657	0.47980	False
IA00226	0.36949	-0.11673	1.04716	False
IA00289	-0.37244	-0.49970	-0.67561	False
IA00407	0.54500	0.37530	-0.70055	False
IA00408	-0.12055	-0.53370	0.64035	False
IA00411	-1.31673	-1.43290	-0.90438	False
IA00412	-1.82213	-2.14850	0.53113	False
IA00414	0.94682	0.54880	0.16579	False
IA00415	-0.70807	-0.83250	-0.76560	False
IA00416	-1.26944	-1.41460	-1.06809	False
IA00419	-1.75604	-1.79610	-0.45692	False
IA00421A	-0.21061	-0.05367	1.59712	False
IA00421D	0.55961	0.80123	2.51533	False

**Table J-15. b/b Analysis—ELA Grade 5**

<i>Item Id</i>	<i>Old b</i>	<i>New b</i>	<i>Std Dist</i>	<i>Flag</i>
IA00209	-0.36247	-0.69220	0.54082	False
IA00210	-0.19153	-0.30440	-0.68200	False
IA00211	0.00047	-0.17170	-0.53021	False
IA00212	-0.45635	-0.55410	-0.65618	False
IA00213	0.15416	-0.04750	-0.38666	False
IA00214	-0.13793	-0.35310	-0.22781	False
IA00215	-0.05417	-0.13900	-0.47271	False
IA00216	-1.41576	-1.68450	0.43282	False
IA00495	-1.40430	-1.60120	-0.01596	False
IA00497	-1.07678	-0.45120	3.67350	True
IA00500	-0.77148	-1.08510	0.54588	False
IA00502	-1.50159	-1.55360	-0.64075	False
IA00503	-2.45046	-2.35550	0.02767	False
IA00506	-0.26135	-0.40680	-0.62880	False
IA00508	0.48214	0.27655	-0.44651	False
IA00509A	-0.04301	-0.09127	-0.24286	False
IA00509D	0.55337	0.48070	-0.24121	False
IA00638	-0.52421	-0.75220	-0.04904	False

**Table J-16. b/b Analysis—ELA Grade 6**

<i>Item Id</i>	<i>Old b</i>	<i>New b</i>	<i>Std Dist</i>	<i>Flag</i>
IA00173	-1.65675	-1.36030	-0.40720	False
IA00174	-0.75205	-0.79420	-0.01857	False
IA00175	-0.80472	-0.60570	1.08121	False
IA00176	-1.52235	-1.34870	-0.68095	False
IA00177	-2.06594	-1.99600	2.97654	False
IA00178	-0.97635	-0.98890	0.31113	False
IA00179	-0.67516	-0.61190	-0.59402	False
IA00180	0.17030	-0.02550	-0.87233	False
IA00181A	-0.19455	-0.27617	-1.16819	False
IA00181D	0.95248	0.46504	0.94033	False
IA00515	-2.16149	-1.75890	-0.52761	False
IA00517	-1.33713	-0.98400	1.61693	False
IA00518	-0.98603	-0.91330	-0.99537	False
IA00520	0.85485	0.60790	-0.04776	False
IA00522	-0.96632	-0.78540	0.22379	False
IA00523	-0.64474	-0.66010	-0.82017	False
IA00528	-1.74228	-1.52795	-0.54094	False
IA00530	-1.43487	-1.13605	0.41657	False
IA00531A	-0.42919	-0.42137	-0.59372	False
IA00531D	0.75899	0.38768	-0.19965	False

**Table J-17. b/b Analysis—ELA Grade 7**

<i>Item Id</i>	<i>Old b</i>	<i>New b</i>	<i>Std Dist</i>	<i>Flag</i>
IA00065	-1.49418	-1.14520	-0.57691	False
IA00066	-1.12843	-0.96250	-0.26000	False
IA00067	-0.26647	-0.04940	0.40904	False
IA00068	-1.30433	-0.99690	-0.70866	False
IA00069	-0.57397	-0.39490	-0.79247	False
IA00070	-0.55566	-0.10700	2.97121	False
IA00071A	-0.41295	-0.34947	-0.49096	False
IA00071D	0.58222	0.52240	-1.07008	False
IA00081	-1.26976	-0.90750	0.10577	False
IA00082	-0.55692	-0.33530	-0.18241	False
IA00257	-2.03674	-1.58240	-0.38020	False
IA00258	-1.95532	-1.59530	-1.01015	False
IA00262	-0.62901	-0.68060	1.54076	False
IA00265	-2.90670	-2.39780	0.24594	False
IA00269	-2.58034	-2.07920	-0.97271	False
IA00655	-1.24035	-1.03270	-0.56913	False
IA00657	-1.51089	-1.32030	0.26796	False
IA00658	-1.89020	-1.41515	0.22734	False
IA00665A	-0.78286	-0.67493	-0.25703	False
IA00665D	0.42656	0.19386	1.60269	False

**Table J-18. b/b Analysis—ELA Grade 8**

<i>Item Id</i>	<i>Old b</i>	<i>New b</i>	<i>Std Dist</i>	<i>Flag</i>
IA00056	-2.07545	-1.83870	-0.94237	False
IA00057	-1.98373	-1.69340	-0.87540	False
IA00058	-0.95200	-0.91950	-0.39933	False
IA00059	-0.73207	-0.49210	0.76166	False
IA00060	-1.15310	-0.88400	0.36523	False
IA00061	-0.58926	-0.43290	-0.03676	False
IA00062	0.32096	-0.03020	2.14211	False
IA00063	0.42752	0.49650	0.70512	False
IA00064A	-0.78843	-0.83073	0.24994	False
IA00064D	0.36137	0.06120	1.42351	False
IA00368	-1.23469	-1.09360	-1.25966	False
IA00371	-0.47282	-0.59460	0.68209	False
IA00373	0.34975	0.23420	-0.89135	False
IA00374	-0.71889	-0.56900	-0.35416	False
IA00376A	-1.08320	-1.01200	-0.65061	False
IA00376D	0.02851	0.24212	1.81010	False
IA00378	-0.28338	-0.18000	-0.15133	False
IA00379	0.69925	0.58830	-1.07778	False
IA00383	-0.68792	-0.69690	-0.35432	False
IA00699	-1.06892	-0.93140	-1.14668	False

**Table J-19. b/b Analysis—Mathematics Grade 3**

<i>Item Id</i>	<i>Old b</i>	<i>New b</i>	<i>Std Dist</i>	<i>Flag</i>
IA00769	-2.15016	-2.34150	-0.99787	False
IA00799	0.11557	0.13790	0.84438	False
IA00805	-0.07550	-0.11620	-0.02131	False
IA00811	0.43890	0.06040	2.07399	False
IA00834	-0.91559	-1.05920	-1.35087	False
IA00838	-1.11458	-1.31040	-0.76972	False
IA00850	-0.93173	-0.99730	-0.23889	False
IA00852	-0.18811	-0.60480	2.51732	False
IA00854	-0.04064	-0.27150	-0.10103	False
IA00857	-0.69798	-0.80660	-0.88801	False
IA00916	0.25687	0.28060	0.84184	False
IA00924	0.78227	0.77110	0.26226	False
IA00930	-0.58568	-0.60750	0.32811	False
IA00932	0.62411	0.54730	-0.64576	False
IA00993	0.00780	-0.24080	0.15886	False
IA00994	0.27394	0.20650	-0.45694	False
IA01019	-1.29907	-1.35830	-0.09042	False
IA01071	-1.03087	-1.21940	-0.86006	False
IA01080	0.95727	0.70427	0.37224	False
IA01081	0.75715	0.59690	-0.97813	False

**Table J-20. b/b Analysis—Mathematics Grade 4**

<i>Item Id</i>	<i>Old b</i>	<i>New b</i>	<i>Std Dist</i>	<i>Flag</i>
IA00779	-1.61119	-1.65240	-0.16165	False
IA00789	0.47334	0.31025	-0.06179	False
IA00837	0.17782	-0.15030	0.10826	False
IA00839	0.03433	-0.23710	-0.30674	False
IA00841	-0.48865	-0.72470	0.18074	False
IA00861	-1.18740	-1.19850	-1.14681	False
IA00869	1.39924	1.09540	-0.11107	False
IA00906	-0.38139	-0.78310	1.93089	False
IA00912	-1.72591	-1.29190	3.12455	True
IA00956	0.29234	0.08370	-0.90553	False
IA00958	0.21707	0.11060	0.15816	False
IA00961	0.47820	0.18910	-0.86483	False
IA00963	-0.69459	-0.67050	0.11296	False
IA00969	-0.60973	-0.58550	0.26075	False
IA01048	0.29063	0.13330	-0.30919	False
IA01049	-0.38128	-0.57420	-0.50794	False
IA01055	-0.36342	-0.49390	-1.12203	False
IA01057	-0.16223	-0.43943	0.09912	False
IA01088	-0.51801	-0.76080	0.31002	False
IA01093	-0.67542	-0.80100	-0.78787	False



**Table J-21. b/b Analysis—Mathematics Grade 5**

<i>Item Id</i>	<i>Old b</i>	<i>New b</i>	<i>Std Dist</i>	<i>Flag</i>
IA00771	-1.40158	-1.53930	-0.96367	False
IA00776	-0.83359	-0.78590	0.17786	False
IA00803	-0.57900	-0.72710	-0.80174	False
IA00806	0.08200	-0.00260	-1.21413	False
IA00826	-1.75983	-1.79760	-0.61482	False
IA00872	-0.33332	-0.27940	0.20526	False
IA00880	1.15724	0.92700	0.14455	False
IA00885	-0.57871	-0.92600	1.19742	False
IA00936	-0.97329	-1.05200	-1.08093	False
IA00941	-2.09357	-1.83920	2.34063	False
IA00943	0.08297	0.00460	-1.15168	False
IA00989	-1.73726	-1.75860	-0.45150	False
IA01020	0.59535	0.62760	-0.07743	False
IA01027	-0.55885	-0.91450	1.28272	False
IA01028	0.76140	0.85900	0.56678	False
IA01029	-1.81214	-2.21610	1.67958	False
IA01030	0.00398	-0.21785	-0.02083	False
IA01032	0.48415	0.49090	-0.32555	False
IA01149	0.31944	0.08890	0.08874	False
IA01155	0.15315	0.09225	-0.98127	False

**Table J-22. b/b Analysis—Mathematics Grade 6**

<i>Item Id</i>	<i>Old b</i>	<i>New b</i>	<i>Std Dist</i>	<i>Flag</i>
IA00777	-1.59533	-1.63520	0.15960	False
IA00778	-1.20977	-1.25070	0.21138	False
IA00782	-0.12021	-0.63710	2.51485	False
IA00804	-1.31815	-1.51440	-0.80904	False
IA00818	0.64798	0.65450	1.03803	False
IA00819	-0.05298	-0.15270	-0.24390	False
IA00827	-0.44137	-0.59480	-0.89758	False
IA00845	-0.12482	-0.27830	-0.84606	False
IA00881	0.06548	-0.14513	-0.87901	False
IA00884	1.37690	1.17730	-1.10548	False
IA00899	0.55614	0.49010	0.22614	False
IA00972	-1.07375	-1.18565	-0.54557	False
IA00975	0.97888	0.46670	2.28234	False
IA00992	1.60570	1.50320	-0.00158	False
IA01058	0.43080	0.28520	-0.66813	False
IA01063	1.23847	0.96710	-0.40471	False
IA01064	0.40295	0.11380	-0.07202	False
IA01117	-1.78853	-2.07590	0.26892	False
IA01131	-0.42661	-0.51930	-0.22817	False

**Table J-23. b/b Analysis—Mathematics Grade 7**

<i>Item Id</i>	<i>Old b</i>	<i>New b</i>	<i>Std Dist</i>	<i>Flag</i>
IA00796	0.21167	0.03830	-0.20001	False
IA00831	-0.81838	-0.78670	-0.03287	False
IA00847	-0.31622	-0.38780	-0.96348	False
IA00878	0.63035	0.28503	1.33446	False
IA00907	-0.40234	-0.43660	-0.63062	False
IA00909	-1.54066	-1.63000	-1.00632	False
IA00910	0.35795	0.27000	-0.94935	False
IA00945	-1.06359	-1.08550	-0.49739	False
IA00948	-1.27981	-1.23860	0.06815	False
IA00949	-0.15441	-0.37410	0.19587	False
IA01004	0.93863	0.91700	-0.56794	False
IA01006	-1.55586	-2.04150	2.49439	False
IA01011	0.12512	0.14900	-0.13620	False
IA01016	0.22362	-0.02140	0.43344	False
IA01017	-1.21096	-0.91890	2.28187	False
IA01018	0.36697	0.21770	-0.40727	False
IA01069	-0.18362	-0.13823	0.06515	False
IA01097	0.40422	0.34750	-0.85847	False
IA01100	0.69005	0.75780	0.23079	False
IA01108	0.24469	0.14550	-0.85418	False

**Table J-24. b/b Analysis—Mathematics Grade 8**

<i>Item Id</i>	<i>Old b</i>	<i>New b</i>	<i>Std Dist</i>	<i>Flag</i>
IA00774	-0.85241	-0.95910	-0.17491	False
IA00849	-0.70465	-0.74840	-0.69746	False
IA00858	-1.16553	-1.11790	-0.31851	False
IA00864	-0.93794	-0.96725	-0.67240	False
IA00865	0.36231	0.31380	-0.11281	False
IA00866	0.31974	0.20650	-0.59510	False
IA00897	0.25744	0.34320	0.77565	False
IA00903	-0.84889	-0.74170	0.28605	False
IA00905	0.17305	0.03170	-0.52413	False
IA00979	0.78884	0.49410	0.20344	False
IA00980	0.21732	0.15340	-0.30578	False
IA00985	0.24645	0.16110	-0.44040	False
IA00986	0.88112	0.79310	-0.09149	False
IA01033	-0.03477	-0.04660	-0.08360	False
IA01037	0.21114	0.13470	-0.39787	False
IA01042	0.07319	-0.69220	3.94548	True
IA01044	-0.80718	-0.72600	0.12634	False
IA01066	-0.41740	-0.42133	-0.24945	False
IA01113	0.89595	0.62080	0.00288	False
IA01125	0.25162	0.12530	-0.67591	False

**Table J-25. Beta Analysis—ELA Grade 3**

<i>itemID</i>	<i>NCat</i>	<i>oldmean</i>	<i>mean</i>	<i>oldform</i>	<i>form</i>	<i>beta</i>	<i>flag_beta</i>
IA00279	2	0.86	0.84	1	ON01	-0.019	0
IA00280	2	0.73	0.73	1	ON01	-0.015	0
IA00281	2	0.66	0.64	1	ON01	-0.028	0
IA00282	2	0.77	0.72	1	ON01	-0.042	0
IA00283	2	0.71	0.68	1	ON01	-0.028	0
IA00284	2	0.77	0.75	1	ON01	-0.025	0
IA00285	2	0.87	0.85	1	ON01	-0.020	0
IA00450	2	0.71	0.72	4	ON02	-0.028	0
IA00444	2	0.74	0.78	4	ON02	0.000	0
IA00443	2	0.73	0.73	4	ON02	-0.018	0
IA00451	2	0.52	0.50	4	ON02	-0.047	0
IA00453	2	0.69	0.70	4	ON02	-0.025	0
IA00446	2	0.63	0.67	4	ON02	-0.008	0
IA00458A	4	0.77	1.10	4	ON02	0.052	1
IA00458D	5	0.66	0.99	4	ON02	0.034	0
IA00452	3	1.24	1.22	4	ON02	-0.033	0
IA00445	3	1.18	1.17	4	ON02	-0.027	0
IA00287	4	1.39	1.51	1	ON01	0.010	0
IA00288	4	1.11	1.25	1	ON01	0.013	0

**Table J-26. Beta Analysis—ELA Grade 4**

<i>itemID</i>	<i>NCat</i>	<i>oldmean</i>	<i>mean</i>	<i>oldform</i>	<i>form</i>	<i>beta</i>	<i>flag_beta</i>
IA00218	2	0.82	0.87	1	ON01	0.007	0
IA00289	2	0.61	0.64	1	ON01	-0.013	0
IA00221	2	0.55	0.60	1	ON01	0.015	0
IA00220	2	0.46	0.50	1	ON01	0.007	0
IA00219	2	0.80	0.84	1	ON01	0.011	0
IA00222	2	0.79	0.81	1	ON01	-0.018	0
IA00223	2	0.57	0.62	1	ON01	0.000	0
IA00224	2	0.74	0.79	1	ON01	0.006	0
IA00412	2	0.94	0.94	4	ON02	0.001	0
IA00411	2	0.87	0.85	4	ON02	-0.016	0
IA00414	2	0.43	0.47	4	ON02	0.038	0
IA00415	2	0.76	0.76	4	ON02	-0.007	0
IA00407	2	0.48	0.48	4	ON02	-0.003	0
IA00408	2	0.61	0.64	4	ON02	0.028	0
IA00421A	4	1.70	1.55	4	ON02	-0.045	0
IA00421D	5	1.67	1.46	4	ON02	-0.049	0
IA00416	3	1.58	1.60	4	ON02	0.002	0
IA00419	3	1.74	1.72	4	ON02	-0.011	0
IA00225	4	1.52	1.68	1	ON01	0.039	0
IA00226	4	1.36	1.59	1	ON01	0.056	1

**Table J-27. Beta Analysis—ELA Grade 5**

<i>itemID</i>	<i>NCat</i>	<i>oldmean</i>	<i>mean</i>	<i>oldform</i>	<i>form</i>	<i>beta</i>	<i>flag_beta</i>
IA00209	2	0.65	0.74	1	ON01	0.033	0
IA00210	2	0.61	0.66	1	ON01	0.009	0
IA00211	2	0.59	0.65	1	ON01	0.012	0
IA00212	2	0.64	0.70	1	ON01	0.013	0
IA00213	2	0.55	0.61	1	ON01	0.012	0
IA00214	2	0.63	0.68	1	ON01	0.007	0
IA00215	2	0.54	0.58	1	ON01	0.003	0
IA00216	2	0.88	0.92	1	ON01	0.011	0
IA00497	2	0.77	0.78	4	ON02	0.006	0
IA00638	2	0.68	0.70	4	ON02	0.025	0
IA00495	2	0.82	0.84	4	ON02	0.018	0
IA00506	2	0.63	0.64	4	ON02	0.013	0
IA00500	2	0.70	0.72	4	ON02	0.028	0
IA00502	2	0.87	0.87	4	ON02	0.010	0
IA00509A	4	1.64	1.55	4	ON02	-0.019	0
IA00509D	5	1.71	1.58	4	ON02	-0.027	0
IA00508	3	0.87	0.88	4	ON02	0.003	0
IA00503	3	1.77	1.77	4	ON02	0.000	0

**Table J-28. Beta Analysis—ELA Grade 6**

<i>itemID</i>	<i>NCat</i>	<i>oldmean</i>	<i>mean</i>	<i>oldform</i>	<i>form</i>	<i>beta</i>	<i>flag_beta</i>
IA00173	2	0.85	0.84	1	ON01	-0.019	0
IA00174	2	0.68	0.68	1	ON01	0.013	0
IA00175	2	0.68	0.69	1	ON01	-0.021	0
IA00176	2	0.77	0.76	1	ON01	-0.002	0
IA00177	2	0.91	0.91	1	ON01	0.004	0
IA00179	2	0.67	0.66	1	ON01	0.008	0
IA00178	2	0.77	0.78	1	ON01	0.007	0
IA00180	2	0.58	0.60	1	ON01	0.002	0
IA00515	2	0.88	0.87	4	ON02	-0.006	0
IA00520	2	0.51	0.53	4	ON02	0.009	0
IA00517	2	0.80	0.78	4	ON02	-0.022	0
IA00518	2	0.72	0.71	4	ON02	-0.024	0
IA00523	2	0.67	0.68	4	ON02	-0.004	0
IA00522	2	0.79	0.80	4	ON02	-0.005	0
IA00181A	4	1.63	1.75	1	ON01	0.004	0
IA00531A	4	1.83	1.87	4	ON02	0.004	0
IA00181D	6	1.78	1.99	1	ON01	0.013	0
IA00531D	6	1.96	2.04	4	ON02	0.001	0
IA00528	3	1.70	1.69	4	ON02	-0.005	0
IA00530	3	1.54	1.47	4	ON02	-0.027	0

**Table J-29. Beta Analysis—ELA Grade 7**

<i>itemID</i>	<i>NCat</i>	<i>oldmean</i>	<i>mean</i>	<i>oldform</i>	<i>form</i>	<i>beta</i>	<i>flag_beta</i>
IA00065	2	0.80	0.83	1	ON01	-0.037	0
IA00066	2	0.70	0.74	1	ON01	-0.027	0
IA00067	2	0.54	0.59	1	ON01	-0.019	0
IA00081	2	0.70	0.75	1	ON01	-0.033	0
IA00069	2	0.62	0.67	1	ON01	-0.031	0
IA00068	2	0.76	0.80	1	ON01	-0.023	0
IA00082	2	0.58	0.64	1	ON01	-0.010	0
IA00070	2	0.59	0.62	1	ON01	-0.043	0
IA00257	2	0.90	0.89	4	ON02	-0.025	0
IA00269	2	0.91	0.91	4	ON02	-0.012	0
IA00655	2	0.77	0.79	4	ON02	-0.008	0
IA00262	2	0.68	0.72	4	ON02	0.019	0
IA00265	2	0.91	0.92	4	ON02	-0.001	0
IA00657	2	0.84	0.83	4	ON02	-0.025	0
IA00071A	4	1.64	1.87	1	ON01	0.006	0
IA00665A	4	1.93	2.09	4	ON02	0.020	0
IA00071D	6	1.77	2.06	1	ON01	0.010	0
IA00665D	6	1.98	2.33	4	ON02	0.035	0
IA00258	3	1.59	1.59	4	ON02	-0.011	0
IA00658	3	1.55	1.51	4	ON02	-0.025	0

**Table J-30. Beta Analysis—ELA Grade 8**

<i>itemID</i>	<i>NCat</i>	<i>oldmean</i>	<i>mean</i>	<i>oldform</i>	<i>form</i>	<i>beta</i>	<i>flag_beta</i>
IA00056	2	0.82	0.84	1	ON01	-0.005	0
IA00057	2	0.79	0.80	1	ON01	-0.013	0
IA00058	2	0.76	0.80	1	ON01	0.002	0
IA00059	2	0.67	0.70	1	ON01	0.001	0
IA00060	2	0.81	0.84	1	ON01	-0.018	0
IA00061	2	0.60	0.65	1	ON01	0.013	0
IA00062	2	0.52	0.57	1	ON01	0.018	0
IA00063	2	0.49	0.49	1	ON01	-0.032	0
IA00374	2	0.75	0.72	4	ON02	-0.041	0
IA00699	2	0.81	0.81	4	ON02	-0.004	0
IA00378	2	0.61	0.60	4	ON02	-0.018	0
IA00368	2	0.81	0.81	4	ON02	-0.006	0
IA00383	2	0.72	0.71	4	ON02	-0.015	0
IA00379	2	0.56	0.54	4	ON02	-0.019	0
IA00064A	4	2.05	2.20	1	ON01	0.015	0
IA00376A	4	2.25	2.26	4	ON02	-0.001	0
IA00064D	6	2.19	2.43	1	ON01	0.022	0
IA00376D	6	2.53	2.41	4	ON02	-0.019	0
IA00371	3	1.19	1.26	4	ON02	0.019	0
IA00373	3	0.91	0.93	4	ON02	0.003	0

**Table J-31. Beta Analysis—Mathematics Grade 3**

<i>itemID</i>	<i>NCat</i>	<i>oldmean</i>	<i>mean</i>	<i>oldform</i>	<i>form</i>	<i>beta</i>	<i>flag_beta</i>
IA00811	2	0.53	0.61	1	ON01	0.051	1
IA00916	2	0.51	0.48	4	ON02	-0.036	0
IA00834	2	0.81	0.85	5	ON03	0.027	0
IA00799	2	0.59	0.56	7	ON05	-0.025	0
IA00852	2	0.62	0.70	8	ON06	0.064	1
IA00838	2	0.81	0.82	9	ON07	0.005	0
IA00857	2	0.76	0.73	13	ON11	-0.029	0
IA00854	2	0.61	0.66	14	ON12	0.042	0
IA00932	2	0.52	0.48	15	ON13	-0.039	0
IA00924	2	0.55	0.50	16	ON14	-0.063	1
IA00994	2	0.62	0.53	17	ON15	-0.097	1
IA01019	2	0.78	0.81	19	ON17	0.021	0
IA00993	2	0.62	0.65	20	ON18	0.027	0
IA00805	2	0.55	0.55	1	ON20	-0.030	0
IA00930	2	0.70	0.67	6	ON04	-0.031	0
IA00850	2	0.80	0.77	11	ON09	-0.032	0
IA01071	2	0.75	0.76	18	ON16	0.007	0
IA00769	2	0.85	0.90	1	ON19	0.009	0
IA01081	4	0.98	1.09	10	ON08	0.009	0
IA01080	4	0.69	1.08	1	ON26	0.024	0

**Table J-32. Beta Analysis—Mathematics Grade 4**

<i>itemID</i>	<i>NCat</i>	<i>oldmean</i>	<i>mean</i>	<i>oldform</i>	<i>form</i>	<i>beta</i>	<i>flag_beta</i>
IA00963	2	0.59	0.76	1	ON01	-0.047	0
IA00779	2	0.90	0.90	6	ON04	-0.010	0
IA00956	2	0.49	0.53	7	ON05	0.016	0
IA00841	2	0.78	0.78	9	ON07	-0.013	0
IA00839	2	0.63	0.62	10	ON08	-0.035	0
IA00906	2	0.74	0.76	11	ON09	0.008	0
IA00958	2	0.55	0.57	12	ON10	-0.003	0
IA01048	2	0.53	0.56	14	ON12	0.007	0
IA00961	2	0.52	0.54	15	ON13	0.006	0
IA00969	2	0.75	0.77	19	ON17	-0.007	0
IA01049	2	0.69	0.70	20	ON18	-0.015	0
IA00861	2	0.73	0.87	1	ON25	0.001	0
IA00837	2	0.48	0.54	4	ON02	0.041	0
IA00912	2	0.76	0.72	5	ON03	-0.065	1
IA01088	2	0.64	0.67	8	ON06	0.010	0
IA00869	2	0.17	0.24	18	ON16	0.040	0
IA01055	2	0.40	0.64	1	ON21	-0.022	0
IA01093	3	1.41	1.41	16	ON14	-0.011	0
IA01057	5	2.26	2.35	13	ON11	0.009	0
IA00789	5	1.45	1.75	1	ON23	0.012	0

**Table J-33. Beta Analysis—Mathematics Grade 5**

<i>itemID</i>	<i>NCat</i>	<i>oldmean</i>	<i>mean</i>	<i>oldform</i>	<i>form</i>	<i>beta</i>	<i>flag_beta</i>
IA00806	2	0.34	0.55	1	ON01	-0.017	0
IA00880	2	0.21	0.28	6	ON04	0.040	0
IA00803	2	0.75	0.75	7	ON05	-0.006	0
IA00826	2	0.92	0.90	8	ON06	-0.019	0
IA00872	2	0.65	0.64	9	ON07	-0.018	0
IA00936	2	0.77	0.77	11	ON09	-0.008	0
IA00941	2	0.94	0.92	12	ON10	-0.020	0
IA00943	2	0.68	0.67	13	ON11	-0.027	0
IA00989	2	0.90	0.90	14	ON12	-0.004	0
IA01020	2	0.40	0.42	15	ON13	0.009	0
IA00885	2	0.73	0.79	4	ON18	0.035	0
IA00771	2	0.81	0.81	10	ON08	-0.015	0
IA01027	2	0.66	0.74	16	ON14	0.061	1
IA01028	2	0.30	0.26	17	ON15	-0.044	0
IA01149	2	0.43	0.48	18	ON16	0.029	0
IA01029	2	0.88	0.92	19	ON17	0.034	0
IA00776	2	0.51	0.70	1	ON20	-0.039	0
IA01155	3	0.95	0.96	5	ON03	-0.007	0
IA01030	5	2.00	2.25	4	ON02	0.021	0
IA01032	5	1.42	1.58	1	ON19	-0.018	0

**Table J-34. Beta Analysis—Mathematics Grade 6**

<i>itemID</i>	<i>NCat</i>	<i>oldmean</i>	<i>mean</i>	<i>oldform</i>	<i>form</i>	<i>beta</i>	<i>flag_beta</i>
IA00992	2	0.39	0.42	4	ON02	0.009	0
IA00818	2	0.46	0.45	7	ON05	-0.041	0
IA01063	2	0.40	0.46	9	ON07	0.027	0
IA01064	2	0.46	0.51	10	ON08	0.017	0
IA00827	2	0.67	0.70	11	ON09	-0.001	0
IA00777	2	0.86	0.85	12	ON10	-0.021	0
IA00778	2	0.85	0.84	13	ON11	-0.030	0
IA01058	2	0.53	0.53	15	ON13	-0.039	0
IA00845	2	0.65	0.64	18	ON16	-0.041	0
IA00975	2	0.32	0.46	1	ON19	0.065	1
IA00899	2	0.37	0.37	8	ON01	-0.030	0
IA00782	2	0.54	0.65	6	ON04	0.083	1
IA00819	2	0.43	0.54	1	ON06	-0.018	0
IA01117	2	0.87	0.91	14	ON12	0.026	0
IA00884	2	0.17	0.20	17	ON15	-0.004	0
IA00804	2	0.74	0.77	19	ON17	0.014	0
IA01131	3	1.08	1.30	1	ON03	-0.009	0
IA00881	5	1.79	2.17	1	ON18	0.008	0
IA00972	5	3.03	3.11	4	ON20	-0.010	0

**Table J-35. Beta Analysis—Mathematics Grade 7**

<i>itemID</i>	<i>NCat</i>	<i>oldmean</i>	<i>mean</i>	<i>oldform</i>	<i>form</i>	<i>beta</i>	<i>flag_beta</i>
IA01006	2	0.75	0.88	01	ON01	0.015	0
IA00945	2	0.59	0.75	01	ON02	0.010	0
IA00796	2	0.54	0.56	10	ON08	0.007	0
IA00907	2	0.72	0.72	11	ON09	-0.003	0
IA00948	2	0.81	0.88	01p	ON11	-0.015	0
IA01011	2	0.57	0.54	14	ON12	-0.043	0
IA00909	2	0.90	0.91	15	ON13	0.008	0
IA01017	2	0.83	0.77	16	ON14	-0.059	1
IA00831	2	0.78	0.76	20	ON18	-0.012	0
IA01016	2	0.61	0.64	21	ON19	0.027	0
IA00949	2	0.40	0.60	01	ON05	0.039	0
IA01097	2	0.38	0.39	08	ON06	-0.017	0
IA00910	2	0.43	0.42	09	ON07	-0.009	0
IA01018	2	0.41	0.43	12	ON10	0.009	0
IA01004	2	0.25	0.24	17	ON15	-0.038	0
IA01100	2	0.30	0.27	18	ON16	-0.055	1
IA00847	2	0.60	0.60	19	ON17	0.010	0
IA01108	3	0.61	0.93	01	ON04	0.001	0
IA00878	5	1.42	1.66	04	ON02	0.041	0
IA01069	5	2.10	2.19	01	ON03	-0.016	0

**Table J-36. Beta Analysis—Mathematics Grade 8**

<i>itemID</i>	<i>NCat</i>	<i>oldmean</i>	<i>mean</i>	<i>oldform</i>	<i>form</i>	<i>beta</i>	<i>flag_beta</i>
IA00858	2	0.67	0.84	1	ON01	-0.015	0
IA01042	2	0.42	0.69	1	ON05	0.175	1
IA00986	2	0.45	0.47	9	ON07	0.002	0
IA01033	2	0.66	0.64	10	ON08	-0.024	0
IA00774	2	0.77	0.78	11	ON09	0.001	0
IA00865	2	0.55	0.54	13	ON11	-0.017	0
IA00905	2	0.35	0.53	1	ON12	0.009	0
IA00903	2	0.78	0.78	15	ON13	-0.008	0
IA00985	2	0.59	0.59	19	ON18	-0.011	0
IA00979	2	0.58	0.59	6	ON20	0.001	0
IA00866	2	0.22	0.44	1	ON04	0.003	0
IA01113	2	0.28	0.33	8	ON06	0.037	0
IA01037	2	0.45	0.46	12	ON10	-0.002	0
IA01044	2	0.71	0.69	17	ON15	-0.026	0
IA00897	2	0.43	0.39	18	ON16	-0.057	1
IA00849	2	0.71	0.70	5	ON17	-0.001	0
IA00980	2	0.46	0.47	20	ON19	-0.006	0
IA01125	3	0.92	0.94	16	ON14	0.007	0
IA01066	5	2.48	2.50	4	ON02	-0.013	0
IA00864	5	2.93	3.10	1	ON03	-0.005	0



**Table J-37. IRT Parameters for Dichotomous Items—ELA Grade 3**

<i>Item Number</i>	<i>Parameters and Measures of Standard Error</i>					
	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>c</i>	<i>SE (c)</i>
IA01271	0.56825	0.01468	-1.48234	0.36368	0.11760	0.04440
IA01273	0.78044	0.01457	-1.27191	0.30850	0.05400	0.02720
IA01285	0.55876	0.00949	-1.51253	0.31787	0.01750	0.02620
IA01279	0.88281	0.01677	-1.37686	0.30579	0.06490	0.02840
IA01283	0.52528	0.01711	-0.37618	0.34619	0.23950	0.02570
IA01364	0.45611	0.02100	0.61388	0.34307	0.29060	0.02000
IA01920	1.08054	0.02191	0.57713	0.27373	0.17590	0.00570
IA01353	0.22235	0.00892	-0.50883	0.47093	0.03220	0.03740
IA01366	0.73369	0.01451	-0.09621	0.28976	0.12880	0.01210
IA01361	0.67242	0.01502	-0.47561	0.30579	0.12360	0.01880
IA01503	0.78219	0.01722	-0.08111	0.29143	0.18950	0.01250
IA01499	0.49411	0.01931	0.92592	0.31017	0.18990	0.01490
IA01509	1.15169	0.02208	0.23239	0.27487	0.18520	0.00670
IA01510	1.11126	0.02659	0.63710	0.27602	0.29970	0.00600
IA01506	0.95903	0.01908	0.66865	0.27425	0.15020	0.00570

**Table J-38. IRT Parameters for Dichotomous Items—ELA Grade 4**

<i>Item Number</i>	<i>Parameters and Measures of Standard Error</i>					
	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>c</i>	<i>SE (c)</i>
IA01427	0.89114	0.03082	1.15610	0.16815	0.36370	0.00580
IA01431	0.59205	0.01620	-0.17809	0.20215	0.18320	0.01840
IA01439	1.13267	0.02173	-1.11055	0.17985	0.18370	0.01930
IA01434	0.84331	0.01608	-0.55945	0.17955	0.14510	0.01460
IA01432	0.83970	0.01719	-0.55764	0.18197	0.17290	0.01530
IA01298	0.51376	0.01491	-0.33411	0.21921	0.11520	0.02380
IA01309	0.52273	0.01282	-0.41373	0.20680	0.03430	0.02160
IA01300	0.83842	0.01474	-1.24921	0.18934	0.04600	0.02420
IA01306	0.58559	0.01241	-1.32782	0.21901	0.04170	0.03230
IA01305	0.82333	0.02179	-1.71645	0.23838	0.31020	0.04490
IA01732	0.65561	0.01585	-0.32139	0.19368	0.15690	0.01730
IA01733	0.65427	0.02324	0.90624	0.18066	0.32740	0.00940
IA01736	0.58972	0.01153	-0.89278	0.20034	0.02510	0.02240
IA01725	0.97246	0.01666	-0.87068	0.17561	0.07090	0.01560
IA01738	0.87844	0.01596	0.28480	0.16421	0.09200	0.00690

**Table J-39. IRT Parameters for Dichotomous Items—ELA Grade 5**

<i>Item Number</i>	<i>Parameters and Measures of Standard Error</i>					
	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>c</i>	<i>SE (c)</i>
IA01564	0.43128	0.01035	-0.07796	0.18913	0.01270	0.01670
IA01589	0.84114	0.01650	-1.42490	0.18340	0.13680	0.02570
IA01598	0.57903	0.01129	-2.06688	0.21653	0.04590	0.03950
IA01592	0.36164	0.00736	-0.98013	0.20549	0.00920	0.01980
IA01597	0.48520	0.01124	-1.17406	0.21526	0.03720	0.02940
IA01590	0.76132	0.01478	-0.70635	0.17119	0.12630	0.01570
IA01760	0.60638	0.01417	-0.37692	0.18138	0.13610	0.01660
IA01556	1.02277	0.01644	-0.09028	0.15048	0.13000	0.00680
IA01562	1.22432	0.02242	-1.02697	0.15961	0.20940	0.01370
IA01554	0.84087	0.01882	-0.05024	0.16354	0.31120	0.00990
IA01553	0.49594	0.01578	-0.48524	0.22067	0.21310	0.02480
IA01563	0.83577	0.01506	-1.09823	0.17246	0.10450	0.01900
IA01977	0.48553	0.00781	-2.42637	0.20474	0.01900	0.02930
IA01347	0.26328	0.00880	-0.23323	0.26698	0.01840	0.02730
IA01339	0.77300	0.01484	-0.40878	0.16513	0.15010	0.01240
IA01344	0.62398	0.01428	-0.73481	0.18935	0.15790	0.02040
IA01387	1.05144	0.01843	-0.50797	0.15642	0.20180	0.01000

**Table J-40. IRT Parameters for Dichotomous Items—ELA Grade 6**

<i>Item Number</i>	<i>Parameters and Measures of Standard Error</i>					
	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>c</i>	<i>SE (c)</i>
IA01454	0.43733	0.00920	-0.75039	0.17922	0.01910	0.01950
IA01667	0.44667	0.01272	-0.06202	0.18291	0.17090	0.01730
IA01459	0.44057	0.00786	-1.63069	0.18799	0.01830	0.02460
IA01652	0.61652	0.01355	0.32678	0.14605	0.19340	0.00880
IA01455	0.74496	0.01249	-0.47268	0.14223	0.09630	0.00980
IA01752	0.41906	0.00985	-1.35819	0.21392	0.05460	0.03050
IA01755	0.31712	0.01092	0.16727	0.21773	0.04710	0.02320
IA01748	0.60741	0.01073	-1.01476	0.16003	0.05560	0.01680
IA01758	0.55347	0.00907	-0.99252	0.15812	0.01130	0.01550
IA01757	0.50121	0.00842	-1.26884	0.16931	0.01290	0.01920
IA01661	0.76721	0.01397	-0.04600	0.13982	0.17910	0.00800
IA01660	0.37285	0.00953	0.00395	0.18189	0.02130	0.01730
IA01446	0.53173	0.00846	-1.08352	0.16079	0.01270	0.01630
IA01645	0.67757	0.01230	-0.52123	0.14923	0.14230	0.01170
IA01463	0.35814	0.01388	0.86328	0.19041	0.16900	0.01660

**Table J-41. IRT Parameters for Dichotomous Items—ELA Grade 7**

<i>Item Number</i>	<i>Parameters and Measures of Standard Error</i>					
	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>c</i>	<i>SE (c)</i>
IA01469	0.50122	0.01437	-0.41354	0.04926	0.16620	0.02070
IA01484	0.78753	0.01744	0.03469	0.00665	0.26150	0.00890
IA01487	0.73310	0.01543	0.11601	0.00543	0.19390	0.00870
IA01490	0.50355	0.01638	0.69763	0.02145	0.19200	0.01180
IA01486	0.52262	0.00867	-1.85179	0.04092	0.01680	0.02550
IA01267	0.74193	0.01469	-0.85287	0.01945	0.15960	0.01620
IA01264	0.48759	0.00919	-1.30444	0.04270	0.01680	0.02320
IA01963	0.72702	0.01559	-0.47006	0.01655	0.22590	0.01310
IA01969	0.26924	0.00925	-0.06166	0.10377	0.01760	0.02590
IA01960	1.12377	0.02161	-0.77077	0.00432	0.28310	0.01080
IA01872	0.40325	0.01263	-0.05843	0.05616	0.05150	0.02150
IA01874	0.62038	0.01163	-1.52827	0.03847	0.03690	0.02690
IA01876	0.51818	0.01564	0.22159	0.03035	0.20700	0.01420
IA01877	0.33751	0.00565	-1.32446	0.02735	0.00270	0.01150
IA01881	0.92323	0.01765	0.45332	-0.00458	0.17990	0.00540

**Table J-42. IRT Parameters for Dichotomous Items—ELA Grade 8**

<i>Item Number</i>	<i>Parameters and Measures of Standard Error</i>					
	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>c</i>	<i>SE (c)</i>
IA01533	0.45749	0.01112	-1.20659	0.15989	0.06140	0.03070
IA01537	0.60803	0.01272	-2.03319	0.15509	0.08010	0.04130
IA01538	0.77685	0.01478	0.21184	0.08944	0.14420	0.00740
IA01539	0.44637	0.01267	-1.28115	0.18250	0.10270	0.03640
IA01542	0.51212	0.01344	-1.26574	0.16194	0.13100	0.03240
IA01573	0.46408	0.01241	0.19083	0.11855	0.08430	0.01470
IA01579	0.95314	0.01575	-0.18119	0.08624	0.11580	0.00720
IA01577	0.52880	0.01385	-0.02715	0.11878	0.16750	0.01490
IA01578	0.75235	0.01684	-0.63942	0.10999	0.26290	0.01480
IA01580	0.60041	0.01040	-1.40790	0.12072	0.02240	0.02280
IA01888	0.66209	0.01838	-0.13220	0.11547	0.37580	0.01250
IA01891	0.68521	0.01411	-0.67299	0.11079	0.18850	0.01540
IA01918	0.79976	0.01498	-0.53494	0.09914	0.19770	0.01180
IA01894	0.72933	0.01560	-0.69058	0.11067	0.24150	0.01520
IA01892	0.95890	0.01740	0.07368	0.08658	0.20600	0.00670

**Table J-43. IRT Parameters for Dichotomous Items—ELA Grade 10**

<i>Item Number</i>	<i>Parameters and Measures of Standard Error</i>					
	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>c</i>	<i>SE (c)</i>
IA01801	0.58201	0.00952	-2.56430	0.06480	0.02380	0.03260
IA01796	0.78560	0.01534	-1.88500	0.05830	0.06230	0.03440
IA01790	0.56925	0.01346	-1.65530	0.08690	0.07830	0.03760
IA01786	0.56437	0.01099	-1.60640	0.06540	0.02840	0.02870
IA01771	0.87519	0.01717	-1.74730	0.04920	0.06460	0.03030
IA01802	0.48160	0.01764	-0.00840	0.07080	0.18620	0.02030
IA01417	1.38807	0.02451	-0.72740	0.01660	0.23370	0.00890
IA01412	0.73186	0.01893	-0.98360	0.05740	0.30810	0.02090
IA01402	0.95526	0.01864	-0.48190	0.02390	0.21470	0.01050
IA01406	0.60188	0.01035	-1.61020	0.05290	0.01840	0.02440
IA01413	0.95679	0.01423	-1.62950	0.03060	0.02500	0.01910
IA01403	0.94233	0.01511	-1.95600	0.04030	0.03390	0.02760
IA01628	0.65826	0.01305	-2.11930	0.07700	0.06340	0.04150
IA01629	0.83339	0.01576	-1.46110	0.04430	0.09710	0.02410
IA01635	1.45891	0.03045	-1.70860	0.03030	0.21550	0.02170
IA01805	0.52840	0.00941	-1.63240	0.05980	0.01650	0.02480
IA01631	1.36778	0.02587	-1.40350	0.02480	0.18490	0.01600
IA01632	1.04615	0.02011	-1.75770	0.04290	0.16710	0.02740
IA01326	0.87202	0.01681	-1.42670	0.04310	0.14870	0.02290
IA01327	0.98795	0.02011	-0.29960	0.02180	0.25260	0.00920
IA01331	0.64297	0.01376	-1.93640	0.08010	0.07780	0.04040

**Table J-44. IRT Parameters for Dichotomous Items—Mathematics Grade 3**

<i>Item Number</i>	<i>Parameters and Measures of Standard Error</i>					
	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>c</i>	<i>SE (c)</i>
IA00995	1.00969	0.02581	-1.33032	0.20655	0.35750	0.02830
IA00772	0.87647	0.01646	-1.05814	0.18809	0.10380	0.02140
IA02093	1.10016	0.02311	-1.31265	0.18927	0.19230	0.02500
IA02094	0.67782	0.02114	1.07691	0.17238	0.16990	0.00820
IA04472	1.23655	0.02395	-0.70023	0.17297	0.24680	0.01280
IA04482	0.85887	0.01826	0.26517	0.17052	0.16840	0.00870
IA04474	0.54400	0.01700	-1.17911	0.26291	0.20140	0.04060
IA02512	1.02029	0.01760	-0.46978	0.17042	0.10230	0.01080
IA04473	0.83840	0.01658	-1.12864	0.19369	0.09980	0.02440
IA00801	0.64267	0.01712	-0.68217	0.21283	0.17780	0.02470
IA02509	0.90923	0.01658	-0.40498	0.17405	0.11230	0.01200
IA00825	1.06268	0.02000	-0.90565	0.17857	0.15760	0.01670
IA04600	0.76044	0.01599	-0.20634	0.18073	0.12320	0.01340
IA02513	0.93222	0.01826	-1.46278	0.19614	0.07010	0.03070
IA02510	1.06705	0.02024	-0.51338	0.17346	0.20370	0.01200
IA04475	0.77331	0.01497	-1.39139	0.20223	0.05580	0.03000
IA02144	0.84229	0.01940	-1.28672	0.20704	0.18690	0.03030
IA02381	0.71242	0.00922	-1.53632	0.16806	0.00000	0.00000
IA02522	0.99101	0.01120	0.85883	0.15824	0.00000	0.00000
IA02683	1.24888	0.01251	0.20292	0.15608	0.00000	0.00000
IA00889	0.88593	0.00946	-0.31327	0.15804	0.00000	0.00000
IA02789	0.93784	0.00976	-0.23275	0.15746	0.00000	0.00000
IA04684	0.60381	0.00766	0.13458	0.16001	0.00000	0.00000
IA02303	0.87121	0.00952	-0.68030	0.15962	0.00000	0.00000
IA02686	0.69093	0.00796	0.96988	0.16099	0.00000	0.00000
IA04683	0.94132	0.01000	-0.30659	0.15775	0.00000	0.00000
IA04483	1.13369	0.01215	-0.89838	0.15922	0.00000	0.00000
IA02367	0.80092	0.00892	-0.57701	0.15971	0.00000	0.00000
IA02505	0.97305	0.01239	-1.65150	0.16610	0.00000	0.00000
IA02682	0.82792	0.00922	-0.56552	0.15962	0.00000	0.00000
IA02834	0.63603	0.00766	-0.23717	0.15971	0.00000	0.00000
IA00887	0.88827	0.00952	0.60491	0.15785	0.00000	0.00000
IA02019	0.79846	0.00868	0.06211	0.15785	0.00000	0.00000
IA04638	0.70727	0.00808	-0.48215	0.16021	0.00000	0.00000
IA01072	1.01035	0.01150	-1.02102	0.16040	0.00000	0.00000
IA02304	0.76930	0.00916	-0.49934	0.15971	0.00000	0.00000

**Table J-45. IRT Parameters for Dichotomous Items—Mathematics Grade 4**

<i>Item Number</i>	<i>Parameters and Measures of Standard Error</i>					
	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>c</i>	<i>SE (c)</i>
IA04493	0.82187	0.01521	-2.40357	0.24195	0.04730	0.04420
IA04484	1.02750	0.02160	-0.96604	0.21725	0.24590	0.02030
IA04485	1.00841	0.02842	-1.54205	0.25172	0.40480	0.03560
IA02577	1.37828	0.02441	-0.33227	0.19584	0.20620	0.00910
IA01047	0.83427	0.01703	0.27417	0.20091	0.14610	0.00890
IA04619	1.24583	0.02128	-1.02831	0.20410	0.13300	0.01640
IA04588	1.41421	0.03005	0.71145	0.19086	0.24140	0.00450
IA02344	1.63167	0.02710	0.27003	0.18917	0.15420	0.00470
IA04481	1.27243	0.04457	0.80922	0.19969	0.56510	0.00510
IA04492	1.02612	0.01984	-1.76285	0.22739	0.07110	0.03610
IA02130	1.59079	0.02203	-0.23563	0.18964	0.08170	0.00570
IA04581	1.07470	0.02122	-2.39023	0.23481	0.06160	0.04860
IA02428	1.28896	0.02128	0.26506	0.19105	0.13700	0.00550
IA04653	1.48300	0.02585	-0.62004	0.19574	0.14410	0.01040
IA02578	1.68099	0.02660	-0.05662	0.18983	0.12860	0.00560
IA04549	1.00866	0.01972	-0.67160	0.20983	0.22200	0.01550
IA04580	0.56937	0.01227	-0.69565	0.23406	0.02510	0.02250
IA04494	1.24646	0.02341	-0.23506	0.19809	0.24690	0.00940
IA02900	0.67834	0.00820	0.76752	0.19048	0.00000	0.00000
IA01083	0.79777	0.00945	-1.10241	0.19358	0.00000	0.00000
IA00783	0.48668	0.00795	-1.89697	0.21143	0.00000	0.00000
IA02897	0.95382	0.00970	0.08473	0.18720	0.00000	0.00000
IA02738	0.90437	0.00939	0.41307	0.18757	0.00000	0.00000
IA02737	1.08922	0.01102	0.20833	0.18673	0.00000	0.00000
IA02739	0.74494	0.00895	-0.80375	0.19199	0.00000	0.00000
IA02431	1.02105	0.01039	0.27896	0.18691	0.00000	0.00000
IA04650	0.81824	0.01296	-2.23649	0.20880	0.00000	0.00000
IA02896	0.71171	0.00814	-0.16697	0.18917	0.00000	0.00000
IA01054	1.02381	0.01139	-0.61600	0.18879	0.00000	0.00000
IA04524	0.96841	0.01002	-0.00825	0.18729	0.00000	0.00000
IA02829	0.58489	0.00726	0.37419	0.19001	0.00000	0.00000
IA02740	0.93880	0.01027	-0.70429	0.18973	0.00000	0.00000
IA04635	0.77430	0.00858	-0.14387	0.18861	0.00000	0.00000
IA02741	0.45701	0.00670	0.05825	0.19199	0.00000	0.00000

**Table J-46. IRT Parameters for Dichotomous Items—Mathematics Grade 5**

<i>Item Number</i>	<i>Parameters and Measures of Standard Error</i>					
	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>c</i>	<i>SE (c)</i>
IA04603	1.26043	0.01858	-1.21603	0.12857	0.02600	0.01400
IA04478	0.88777	0.01669	-1.68772	0.15867	0.05130	0.03400
IA01023	1.49261	0.03968	1.27208	0.11982	0.24900	0.00310
IA00815	1.59844	0.03148	0.81567	0.11751	0.20680	0.00340
IA04470	1.09275	0.01865	0.00711	0.12347	0.15010	0.00740
IA04569	1.07386	0.02030	0.82433	0.11943	0.12220	0.00420
IA00829	0.71678	0.01583	0.04711	0.13780	0.14490	0.01180
IA00942	0.77981	0.01871	-1.07399	0.16646	0.23670	0.02640
IA04514	1.17992	0.01871	-1.10390	0.13078	0.04830	0.01540
IA02134	0.53693	0.02347	-0.06655	0.20185	0.43430	0.02100
IA00939	1.30793	0.03827	1.33314	0.12193	0.29970	0.00350
IA00875	1.43833	0.03234	0.84433	0.11943	0.29020	0.00400
IA02549	0.96235	0.01871	-0.51786	0.13616	0.22340	0.01330
IA04469	0.90556	0.01699	-1.27738	0.14915	0.07320	0.02510
IA00791	0.85518	0.02360	1.07215	0.12530	0.21530	0.00590
IA00900	1.28165	0.02812	0.91280	0.11953	0.22300	0.00400
IA02548	0.47274	0.01602	0.35456	0.16703	0.07050	0.01920
IA00938	0.91950	0.01944	-0.96552	0.14847	0.21110	0.02060
IA04491	1.02018	0.01155	-1.15660	0.11962	0.00000	0.00000
IA01145	0.96883	0.01021	-0.62855	0.11693	0.00000	0.00000
IA02387	0.85213	0.00893	0.65623	0.11674	0.00000	0.00000
IA02926	1.28923	0.01217	0.03000	0.11443	0.00000	0.00000
IA02384	0.83489	0.00862	0.20954	0.11597	0.00000	0.00000
IA02918	1.14905	0.01143	0.32099	0.11491	0.00000	0.00000
IA01026	0.89364	0.00948	0.71355	0.11674	0.00000	0.00000
IA00937	0.93221	0.00948	0.22646	0.11549	0.00000	0.00000
IA02922	0.77412	0.00856	-0.75549	0.11885	0.00000	0.00000
IA02734	0.31599	0.00648	-2.45273	0.15972	0.00000	0.00000
IA02916	0.58535	0.01064	-2.47908	0.14665	0.00000	0.00000
IA02727	0.63028	0.00758	1.05494	0.12097	0.00000	0.00000
IA04630	0.60607	0.00734	-0.40621	0.11914	0.00000	0.00000
IA02924	1.31515	0.01259	0.32051	0.11453	0.00000	0.00000
IA02921	0.97299	0.00990	-0.25446	0.11587	0.00000	0.00000
IA02725	0.73237	0.00813	-0.40131	0.11770	0.00000	0.00000

**Table J-47. IRT Parameters for Dichotomous Items—Mathematics Grade 6**

<i>Item Number</i>	<i>Parameters and Measures of Standard Error</i>					
	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>c</i>	<i>SE (c)</i>
IA02453	0.78950	0.01225	-2.07124	0.22511	0.02500	0.03190
IA04727	0.92010	0.02132	0.35303	0.19960	0.32180	0.00790
IA02133	0.97006	0.01457	-0.54629	0.19680	0.04700	0.01040
IA04510	1.35704	0.02036	-0.28753	0.19017	0.16110	0.00710
IA04734	0.79960	0.01559	-0.36673	0.20769	0.13540	0.01370
IA02145	1.07741	0.01673	0.29311	0.18986	0.13290	0.00550
IA00895	0.88352	0.01815	-0.16780	0.20551	0.29510	0.01110
IA02464	0.75054	0.01117	-0.86600	0.20707	0.01670	0.01470
IA04590	0.86821	0.01622	-0.04246	0.19971	0.15220	0.00990
IA01062	1.19633	0.01979	-1.22728	0.20375	0.10250	0.01840
IA04497	1.23257	0.01764	-0.33294	0.19058	0.09760	0.00720
IA04589	0.77413	0.01452	-1.06235	0.22034	0.06910	0.02280
IA04570	1.36107	0.03130	0.71494	0.19131	0.41890	0.00450
IA04526	1.06669	0.01735	-1.41731	0.20852	0.04010	0.02240
IA04662	1.41307	0.02268	0.64880	0.18675	0.17280	0.00370
IA02444	1.30533	0.02552	-1.36599	0.20707	0.11900	0.02240
IA04506	1.17852	0.02042	-0.25052	0.19390	0.17120	0.00870
IA01059	1.36056	0.02274	0.64506	0.18664	0.13070	0.00370
IA04658	1.11240	0.02643	1.30221	0.18996	0.20490	0.00370
IA04571	0.85999	0.01713	0.02886	0.20157	0.22510	0.00980
IA02694	0.57083	0.00720	-1.19660	0.19411	0.00000	0.00000
IA02833	1.25979	0.01174	0.17980	0.18364	0.00000	0.00000
IA02691	0.60293	0.00732	-1.09645	0.19255	0.00000	0.00000
IA02080	1.00239	0.01004	-0.85045	0.18727	0.00000	0.00000
IA02823	0.41953	0.00578	0.90413	0.19255	0.00000	0.00000
IA02697	0.81366	0.00828	0.05810	0.18550	0.00000	0.00000
IA04726	1.14234	0.01089	0.50822	0.18405	0.00000	0.00000
IA02822	0.83396	0.00868	0.85437	0.18613	0.00000	0.00000
IA02689	0.89923	0.00992	-1.02855	0.18861	0.00000	0.00000
IA04724	0.69151	0.00856	-1.57488	0.19587	0.00000	0.00000
IA02827	0.90167	0.00913	0.52004	0.18530	0.00000	0.00000
IA02693	0.94579	0.00992	-0.74917	0.18675	0.00000	0.00000
IA02698	0.55575	0.00669	1.52821	0.19369	0.00000	0.00000
IA02826	0.81043	0.00811	0.58276	0.18592	0.00000	0.00000



**Table J-48. IRT Parameters for Dichotomous Items—Mathematics Grade 7**

<i>Item Number</i>	<i>Parameters and Measures of Standard Error</i>					
	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>c</i>	<i>SE (c)</i>
IA04614	0.88683	0.01633	-1.03799	0.12711	0.12020	0.02010
IA04595	0.78015	0.01578	0.07855	0.11649	0.20830	0.00960
IA04644	1.07449	0.01909	0.01515	0.10630	0.17680	0.00700
IA04509	0.97942	0.01600	0.03747	0.10598	0.12400	0.00680
IA04629	1.54565	0.03308	0.77432	0.10121	0.32520	0.00360
IA01005	1.57564	0.03460	0.92900	0.10110	0.31120	0.00330
IA04691	1.60038	0.03449	1.03967	0.10110	0.31080	0.00310
IA04615	0.79029	0.04165	1.35065	0.12603	0.66500	0.00500
IA00950	1.54023	0.05115	1.79614	0.10479	0.24470	0.00240
IA04679	0.72607	0.02500	1.83960	0.11335	0.23760	0.00470
IA04476	1.02346	0.01638	-1.18465	0.11953	0.06780	0.01890
IA02058	0.88727	0.02050	0.21871	0.11497	0.34320	0.00810
IA02031	1.26421	0.02121	0.20689	0.10273	0.21640	0.00520
IA04592	0.95213	0.01719	0.25404	0.10739	0.20120	0.00660
IA02260	2.41806	0.04599	1.02309	0.09763	0.11160	0.00190
IA04534	1.75669	0.03314	-0.59283	0.10489	0.32020	0.00790
IA04645	0.63403	0.00705	-0.62036	0.10110	0.00000	0.00000
IA01102	0.83531	0.00803	0.26152	0.09817	0.00000	0.00000
IA02872	0.76323	0.00743	0.78039	0.09980	0.00000	0.00000
IA02709	0.78655	0.00748	0.16635	0.09850	0.00000	0.00000
IA02878	0.61646	0.00667	1.01398	0.10240	0.00000	0.00000
IA04477	0.66159	0.00694	-0.44032	0.10012	0.00000	0.00000
IA02877	0.88097	0.00862	0.51527	0.09850	0.00000	0.00000
IA04535	1.19636	0.01291	-1.22345	0.10023	0.00000	0.00000
IA04733	1.03870	0.01047	0.83513	0.09839	0.00000	0.00000
IA01012	0.57735	0.00738	1.58683	0.10750	0.00000	0.00000
IA02713	0.54129	0.00607	0.59580	0.10164	0.00000	0.00000
IA04689	1.30858	0.01215	0.36807	0.09676	0.00000	0.00000
IA04593	0.95154	0.00976	1.06124	0.09958	0.00000	0.00000
IA04695	1.07948	0.01106	0.97756	0.09872	0.00000	0.00000
IA02330	1.04667	0.01079	0.99902	0.09904	0.00000	0.00000
IA00951	1.11653	0.01074	0.92152	0.09839	0.00000	0.00000
IA02886	1.12743	0.01041	0.56383	0.09752	0.00000	0.00000
IA02874	1.07493	0.00949	0.68252	0.09796	0.00000	0.00000

**Table J-49. IRT Parameters for Dichotomous Items—Mathematics Grade 8**

<i>Item Number</i>	<i>Parameters and Measures of Standard Error</i>					
	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>c</i>	<i>SE (c)</i>
IA04670	0.84028	0.01891	-1.75747	0.11943	0.20810	0.04080
IA04502	0.71200	0.01397	-0.31962	0.07875	0.07730	0.01300
IA04515	1.58056	0.02345	-0.59551	0.06042	0.14040	0.00710
IA04552	1.10508	0.02794	0.84825	0.06436	0.38950	0.00470
IA04608	1.43860	0.01857	-0.31527	0.05835	0.09990	0.00510
IA04577	0.86516	0.01567	-0.35875	0.07254	0.13920	0.01100
IA04579	1.48181	0.02056	0.29460	0.05649	0.11100	0.00340
IA02475	0.89798	0.02232	1.04494	0.06363	0.20840	0.00500
IA02321	1.03864	0.01698	-0.09900	0.06467	0.18100	0.00730
IA01039	0.92365	0.02073	0.78271	0.06363	0.21370	0.00540
IA04563	0.90650	0.01800	-0.45948	0.07688	0.26360	0.01200
IA02084	0.97697	0.02044	-0.82295	0.08299	0.33780	0.01500
IA04610	1.16948	0.01936	0.27824	0.05970	0.13400	0.00500
IA02062	0.43590	0.00676	-1.67165	0.08465	0.00230	0.01050
IA04554	1.28436	0.02413	-0.33017	0.06612	0.34350	0.00790
IA04555	0.98651	0.01653	-1.43841	0.08351	0.06330	0.02340
IA02061	1.53956	0.03095	0.09987	0.06104	0.36440	0.00530
IA04582	0.72870	0.01187	-0.25615	0.07202	0.05660	0.01010
IA04521	1.18856	0.02203	-0.99139	0.07305	0.19310	0.01430
IA04669	1.31202	0.02936	1.11668	0.05960	0.22690	0.00320
IA04520	0.94455	0.01494	-0.24208	0.06550	0.08520	0.00820
IA04500	1.11587	0.01068	-0.72999	0.05639	0.00000	0.00000
IA04711	1.03052	0.00999	0.70549	0.05597	0.00000	0.00000
IA02932	0.82274	0.00829	-0.45430	0.05680	0.00000	0.00000
IA04664	0.85704	0.00818	1.13542	0.05866	0.00000	0.00000
IA02941	0.52937	0.00625	0.62080	0.06011	0.00000	0.00000
IA02934	0.99997	0.00926	0.18724	0.05535	0.00000	0.00000
IA02938	0.43493	0.00664	-1.21893	0.06798	0.00000	0.00000
IA02945	0.78685	0.00875	-0.77388	0.05815	0.00000	0.00000
IA02944	1.14160	0.01210	-0.89770	0.05732	0.00000	0.00000
IA02936	0.65612	0.00704	-0.28493	0.05752	0.00000	0.00000
IA02751	0.62830	0.00710	-1.07410	0.06198	0.00000	0.00000
IA04556	0.73284	0.00738	0.35868	0.05690	0.00000	0.00000
IA02749	0.46259	0.00591	0.85249	0.06249	0.00000	0.00000

**Table J-50. IRT Parameters for Dichotomous Items—Mathematics Grade 10**

<i>Item Number</i>	<i>Parameters and Measures of Standard Error</i>					
	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>c</i>	<i>SE (c)</i>
IA02336	1.47784	0.03568	-0.95530	0.02770	0.53010	0.01170
IA04675	1.20735	0.01693	-0.42640	0.01400	0.13160	0.00720
IA02317	1.23110	0.02446	-1.24910	0.03130	0.28060	0.01850
IA04519	1.26531	0.01928	-0.05480	0.01180	0.14550	0.00550
IA02362	0.86861	0.01775	-0.05260	0.02370	0.23000	0.00930
IA04677	1.25003	0.02134	0.04880	0.01320	0.23070	0.00580
IA02489	0.94638	0.01440	-0.46610	0.01900	0.08990	0.00930
IA02139	0.90094	0.01434	0.24370	0.01400	0.10210	0.00560
IA02488	1.44156	0.01875	-0.19740	0.00960	0.08790	0.00460
IA02318	1.13927	0.02205	0.53100	0.01300	0.24340	0.00480
IA04518	1.14280	0.01787	-0.15880	0.01480	0.19520	0.00680
IA04536	0.79777	0.01723	-0.14710	0.02930	0.24720	0.01100
IA02290	1.77842	0.05056	1.04260	0.01140	0.38610	0.00310
IA02640	0.97313	0.02257	0.07530	0.02320	0.37520	0.00790
IA04597	0.77737	0.01158	-1.03340	0.03090	0.02190	0.01620
IA02625	0.70447	0.01223	0.13330	0.01970	0.05210	0.00770
IA02631	1.28360	0.03016	0.50190	0.01410	0.37600	0.00480
IA02634	1.22875	0.01981	-0.55370	0.01770	0.23630	0.00910
IA04738	0.59030	0.01123	-1.24460	0.05750	0.02830	0.02590
IA04732	0.50312	0.01382	-0.29430	0.06170	0.04730	0.02160
IA04499	1.36384	0.01893	-0.11990	0.01060	0.13200	0.00510
IA04730	0.80764	0.01605	-0.87630	0.03920	0.16920	0.01840
IA02790	1.41893	0.01311	-0.36840	0.00650	0.00000	0.00000
IA02961	0.87302	0.00835	-0.38610	0.00810	0.00000	0.00000
IA04532	0.97931	0.00917	-0.31020	0.00750	0.00000	0.00000
IA02785	1.11699	0.01041	0.43820	0.00730	0.00000	0.00000
IA02802	1.12281	0.01041	-0.00910	0.00680	0.00000	0.00000
IA02816	0.83051	0.01017	-1.64670	0.01590	0.00000	0.00000
IA02845	0.67748	0.00829	-1.83130	0.01980	0.00000	0.00000
IA02868	0.55420	0.00653	-0.23800	0.01040	0.00000	0.00000
IA02780	1.36155	0.01240	-0.39460	0.00670	0.00000	0.00000
IA02784	1.36390	0.01464	-1.33840	0.01010	0.00000	0.00000

**Table J-51. IRT Parameters for Dichotomous Items—STE Grade 5**

<i>Item Number</i>	<i>Parameters and Measures of Standard Error</i>					
	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>c</i>	<i>SE (c)</i>
IA05240	0.80747	0.01699	-2.73050	0.08030	0.08780	0.05470
IA05380	0.91587	0.03316	1.25130	0.01960	0.32390	0.00520
IA03163	1.01023	0.02052	-0.38680	0.02360	0.25760	0.01020
IA03160	0.98995	0.01817	0.18020	0.01510	0.15480	0.00640
IA03373	0.67831	0.01846	0.15170	0.03420	0.22020	0.01180
IA03152	0.71229	0.01105	-1.29180	0.03530	0.01180	0.01740
IA03181	1.17213	0.01934	-0.31330	0.01460	0.11750	0.00730
IA02991	0.38812	0.00835	-2.13090	0.09930	0.02410	0.03260
IA05407	0.59406	0.02410	0.63880	0.04420	0.35010	0.01200
IA03199	0.66925	0.01581	-1.15350	0.06130	0.16280	0.02570
IA05191	0.89406	0.02322	0.78260	0.01680	0.21960	0.00600
IA03236	0.81605	0.01675	-0.95730	0.03890	0.16220	0.01800
IA03124	0.81076	0.02216	0.35420	0.02470	0.25270	0.00900
IA03159	0.57466	0.02240	0.49750	0.04810	0.31740	0.01330
IA05410	0.69353	0.01711	0.15640	0.03000	0.18750	0.01080
IA03352	0.50735	0.01770	0.49680	0.04720	0.14480	0.01500
IA03349	0.85379	0.01846	0.28770	0.01910	0.16230	0.00760
IA03162	0.76349	0.01758	-0.80240	0.04500	0.24940	0.01780
IA05223	0.97619	0.02111	0.39100	0.01600	0.19350	0.00640
IA03060	0.52769	0.01387	-0.78860	0.07000	0.09580	0.02490
IA05307	0.73216	0.01287	-1.27480	0.04010	0.02770	0.02010
IA05278	0.87337	0.01781	-0.35550	0.02660	0.21030	0.01120
IA03196	0.56243	0.01176	-0.39690	0.03900	0.01550	0.01480
IA03201	0.77072	0.01458	-1.11500	0.03970	0.08000	0.01940
IA03052	0.75232	0.01487	-0.20810	0.02610	0.10320	0.01080
IA03141	0.54468	0.02187	0.57160	0.04950	0.27900	0.01400
IA03309	0.40170	0.00629	-0.88680	0.01800	0.00000	0.00000
IA03375	0.27284	0.00576	-1.38800	0.03320	0.00000	0.00000
IA03384	0.71858	0.00829	-0.82720	0.01110	0.00000	0.00000
IA03278	0.53075	0.00741	-1.26150	0.01750	0.00000	0.00000
IA03258	0.61675	0.00752	-0.97700	0.01350	0.00000	0.00000
IA03276	0.44768	0.00635	-0.45080	0.01330	0.00000	0.00000

**Table J-52. IRT Parameters for Dichotomous Items—STE Grade 8**

<i>Item Number</i>	<i>Parameters and Measures of Standard Error</i>					
	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>c</i>	<i>SE (c)</i>
IA03220	0.99048	0.02963	-0.58760	0.04430	0.56690	0.01240
IA03019	0.66326	0.02457	0.86160	0.03220	0.34090	0.00920
IA03339	1.00388	0.01993	-0.48160	0.02530	0.23910	0.01160
IA03382	0.61599	0.02022	1.12930	0.02490	0.17780	0.00820
IA03226	0.73504	0.02340	0.77490	0.02620	0.30560	0.00810
IA05245	0.36590	0.01529	0.21380	0.10450	0.07010	0.02750
IA05248	1.13286	0.02034	-0.51660	0.02030	0.20570	0.01020
IA03212	0.30841	0.01405	-0.14970	0.16290	0.06180	0.03750
IA03245	0.48795	0.01523	-1.21690	0.11970	0.13150	0.04170
IA05205	0.34550	0.01111	-1.52170	0.16950	0.06320	0.04730
IA03108	0.99336	0.01858	-1.43460	0.04160	0.14130	0.02650
IA03107	1.26437	0.02040	-0.56160	0.01590	0.13120	0.00880
IA05243	1.03580	0.02775	1.02660	0.01500	0.26610	0.00450
IA05352	0.93621	0.01382	-1.57500	0.03300	0.01880	0.02240
IA03227	1.20629	0.02698	0.13660	0.01760	0.37610	0.00650
IA05194	0.85814	0.01928	0.28440	0.02160	0.23650	0.00800
IA03254	0.78777	0.01999	0.64060	0.02050	0.19780	0.00740
IA05204	0.65603	0.01640	0.26390	0.03040	0.13460	0.01120
IA03323	0.44927	0.00647	-1.27210	0.01980	0.00000	0.00000
IA03321	0.47072	0.00711	-1.69820	0.02430	0.00000	0.00000
IA03255	0.61017	0.00735	-0.89650	0.01270	0.00000	0.00000
IA03269	0.48613	0.00741	-2.11510	0.02960	0.00000	0.00000
IA03360	0.98031	0.00970	0.22590	0.00740	0.00000	0.00000
IA03318	0.80694	0.00805	0.55460	0.00900	0.00000	0.00000
IA03287	0.76549	0.00794	0.68690	0.00970	0.00000	0.00000
IA03281	0.66484	0.00758	-0.79540	0.01130	0.00000	0.00000
IA03319	0.68189	0.00741	0.11480	0.00890	0.00000	0.00000
IA03359	0.51699	0.00688	-1.01690	0.01530	0.00000	0.00000
IA03284	0.68424	0.00870	-1.40510	0.01570	0.00000	0.00000
IA03330	0.83104	0.00823	0.13750	0.00800	0.00000	0.00000
IA03188	0.32216	0.00558	-0.33440	0.01660	0.00000	0.00000
IA03333	0.31617	0.00570	-0.82240	0.02080	0.00000	0.00000

**Table J-53. IRT Parameters for Polytomous Items—ELA Grade 3**

Item Number	Parameters and Measures of Standard Error															
	a	SE (a)	b	SE (b)	d0	SE (d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA01278	0.78959	0.00762	-1.05649	0.26924	0.69624	0.01939	-0.69624	0.01318	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01286	1.28251	0.01649	-2.16790	0.27487	0.63840	0.03132	-0.63840	0.02015	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01288A	0.91759	0.01062	0.15520	0.26810	1.52853	0.01932	-0.09197	0.01308	-1.43656	0.01757	0.00000	0.00000	n/a	n/a	n/a	n/a
IA01288D	0.91550	0.01033	0.84646	0.26922	2.21759	0.01947	0.59813	0.01383	-0.73968	0.01786	-2.07604	0.03058	0.00000	0.00000	n/a	n/a
IA01356	0.68208	0.00706	-1.12313	0.27217	1.03109	0.02637	-1.03109	0.01556	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01357	0.82256	0.00768	-0.71035	0.26735	0.54470	0.01502	-0.54470	0.01133	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01501	0.54397	0.00615	-0.47161	0.26947	0.50274	0.01906	-0.50274	0.01461	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01502	0.42455	0.00548	-0.46911	0.27274	0.83998	0.02637	-0.83998	0.01815	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01512	0.50473	0.00553	1.11670	0.27441	2.29949	0.02328	0.48752	0.01867	-2.88701	0.04144	0.00000	0.00000	n/a	n/a	n/a	n/a
IA01919A	0.83532	0.01118	0.91340	0.27515	2.99862	0.02948	-0.54697	0.02184	-2.35166	0.03912	0.00000	0.00000	n/a	n/a	n/a	n/a
IA01919D	0.81912	0.01056	1.94636	0.28193	3.87297	0.03270	0.46288	0.02719	-1.40781	0.04315	-2.92805	0.07900	0.00000	0.00000	n/a	n/a

**Table J-54. IRT Parameters for Polytomous Items—ELA Grade 4**

Item Number	Parameters and Measures of Standard Error															
	a	SE (a)	b	SE (b)	d0	SE (d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA01433	0.84622	0.00909	-1.21177	0.15722	0.19749	0.01701	-0.19749	0.01462	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01441	0.79222	0.00722	-0.99006	0.15716	0.88069	0.01871	-0.88069	0.01209	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01444A	0.90716	0.01043	0.44842	0.15794	1.90844	0.01989	-0.10845	0.01427	-1.79999	0.02393	0.00000	0.00000	n/a	n/a	n/a	n/a
IA01444D	0.95324	0.01089	1.05721	0.16037	2.99657	0.02270	0.55029	0.01579	-1.05608	0.02355	-2.39078	0.04133	0.00000	0.00000	n/a	n/a
IA01657A	0.99559	0.01101	0.32540	0.15571	1.41749	0.01589	-0.06485	0.01211	-1.35263	0.01741	0.00000	0.00000	n/a	n/a	n/a	n/a
IA01657D	0.90028	0.01002	0.99714	0.15848	2.26976	0.01888	0.67348	0.01436	-0.78424	0.02007	-2.15901	0.03470	0.00000	0.00000	n/a	n/a
IA01659	0.48789	0.00600	-1.71705	0.17250	2.15060	0.05345	-2.15060	0.02697	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01664	0.80148	0.00751	-0.17885	0.15418	0.35194	0.01112	-0.35194	0.01005	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01722	0.92417	0.00839	-1.07074	0.15712	1.01556	0.01887	-1.01556	0.01168	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01724	0.86615	0.00728	-0.29156	0.15551	1.62026	0.01705	0.46044	0.01183	-2.08070	0.01535	0.00000	0.00000	n/a	n/a	n/a	n/a
IA01728	1.06305	0.00955	-0.62056	0.15396	0.30431	0.01100	-0.30431	0.00936	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a

**Table J-55. IRT Parameters for Polytomous Items—ELA Grade 5**

Item Number	Parameters and Measures of Standard Error															
	a	SE (a)	b	SE (b)	d0	SE (d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA01350A	1.12850	0.01201	-0.06674	0.14280	1.70066	0.01847	-0.13194	0.01164	-1.56872	0.01545	0.00000	0.00000	n/a	n/a	n/a	n/a
IA01350D	1.04657	0.01074	0.73875	0.14393	2.30521	0.01776	0.68003	0.01264	-0.76621	0.01622	-2.21903	0.02879	0.00000	0.00000	n/a	n/a
IA01547	0.49838	0.00565	-1.01985	0.14677	0.76347	0.02369	-0.76347	0.01608	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01548	0.57499	0.00598	-0.68431	0.14440	0.63322	0.01837	-0.63322	0.01358	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01549A	1.08936	0.01185	0.37523	0.14299	1.73800	0.01638	-0.21332	0.01225	-1.52468	0.01827	0.00000	0.00000	n/a	n/a	n/a	n/a
IA01549D	1.08986	0.01190	0.99891	0.14595	2.97877	0.02053	0.37234	0.01447	-0.90929	0.01981	-2.34183	0.03659	0.00000	0.00000	n/a	n/a
IA01587A	0.89323	0.00980	-0.36644	0.14442	1.90488	0.02487	-0.42080	0.01336	-1.48408	0.01580	0.00000	0.00000	n/a	n/a	n/a	n/a
IA01587D	0.67347	0.00803	0.69969	0.14454	1.70351	0.01945	0.75280	0.01536	-0.50875	0.01798	-1.94756	0.02919	0.00000	0.00000	n/a	n/a
IA01595	0.37238	0.00548	-2.82851	0.16502	0.90961	0.06050	-0.90961	0.04146	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01976	0.49079	0.00570	0.12711	0.14326	0.41036	0.01426	-0.41036	0.01409	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01978	0.88631	0.00958	-1.52319	0.14519	0.10870	0.01816	-0.10870	0.01686	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a

**Table J-56. IRT Parameters for Polytomous Items—ELA Grade 6**

Item Number	Parameters and Measures of Standard Error															
	a	SE (a)	b	SE (b)	d0	SE (d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA01448A	1.10163	0.01119	-0.34528	0.12325	1.28897	0.01641	-0.06135	0.01210	-1.22762	0.01273	0.00000	0.00000	n/a	n/a	n/a	n/a
IA01448D	0.99270	0.00944	0.84429	0.12407	2.49239	0.01723	1.20410	0.01320	-0.08991	0.01351	-1.26712	0.01860	-2.33947	0.02841	0.00000	0.00000
IA01457	0.34186	0.00476	1.42932	0.13148	0.17762	0.02507	-0.17762	0.02746	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01458	0.43146	0.00476	-0.60416	0.13439	2.25051	0.03579	-2.25051	0.02609	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01464	0.62628	0.00606	-0.72752	0.12474	0.28077	0.01536	-0.28077	0.01380	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01647	0.67253	0.00657	-1.30570	0.12620	0.25369	0.01829	-0.25369	0.01591	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01649A	1.05459	0.01064	-0.40413	0.12380	1.43221	0.01803	-0.02055	0.01273	-1.41167	0.01368	0.00000	0.00000	n/a	n/a	n/a	n/a
IA01649D	1.00260	0.00957	0.76045	0.12547	3.12769	0.02231	1.36926	0.01446	-0.16854	0.01446	-1.53220	0.02070	-2.89622	0.03429	0.00000	0.00000
IA01744A	1.04608	0.01064	-0.01579	0.12395	1.57613	0.01695	0.02932	0.01252	-1.60545	0.01605	0.00000	0.00000	n/a	n/a	n/a	n/a
IA01744D	1.05149	0.01013	1.24669	0.12652	3.02723	0.01900	1.35815	0.01432	-0.25743	0.01671	-1.49336	0.02448	-2.73459	0.04107	0.00000	0.00000
IA01947	0.60852	0.00569	-1.56352	0.12834	0.77207	0.02418	-0.77207	0.01687	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01950	0.48187	0.00500	-0.62393	0.12631	0.51603	0.01899	-0.51603	0.01549	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a

**Table J-57. IRT Parameters for Polytomous Items—ELA Grade 7**

Item Number	Parameters and Measures of Standard Error															
	a	SE (a)	b	SE (b)	d0	SE (d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA01268A	1.18549	0.01247	-0.18666	-0.01223	1.62574	0.01718	0.04309	0.01172	-1.66883	0.01550	0.00000	0.00000	n/a	n/a	n/a	n/a
IA01268D	1.23622	0.01284	1.15280	-0.00598	3.27015	0.02231	1.39079	0.01637	-0.29577	0.01885	-1.54311	0.02797	-2.92205	0.06130	0.00000	0.00000
IA01485	0.37297	0.00470	-0.55005	-0.00424	1.40521	0.03019	-1.40521	0.02292	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01494A	1.05687	0.01110	-0.73305	-0.01199	1.28906	0.01951	0.01202	0.01300	-1.30108	0.01291	0.00000	0.00000	n/a	n/a	n/a	n/a
IA01494D	1.03357	0.01025	0.40268	-0.01103	2.92787	0.02409	1.26189	0.01411	-0.10716	0.01325	-1.48355	0.01921	-2.59906	0.03063	0.00000	0.00000
IA01678	0.43379	0.00581	-2.09693	-0.00005	0.28897	0.03674	-0.28897	0.03113	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01884A	1.22661	0.01279	-0.19286	-0.01387	0.93547	0.01296	0.02199	0.01046	-0.95746	0.01150	0.00000	0.00000	n/a	n/a	n/a	n/a
IA01884D	1.08789	0.01078	0.78458	-0.01219	2.03518	0.01456	1.19979	0.01226	-0.04276	0.01288	-1.02255	0.01760	-2.16966	0.02935	0.00000	0.00000
IA01937	0.73786	0.00729	-0.82228	-0.01211	0.31884	0.01412	-0.31884	0.01213	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01940	0.75884	0.00724	-0.33995	-0.01346	0.13389	0.01097	-0.13389	0.01070	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01945	0.69780	0.00671	-0.09358	-0.01334	0.15597	0.01104	-0.15597	0.01104	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01962	1.04002	0.00978	-1.35122	-0.01215	0.28831	0.01411	-0.28831	0.01202	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a

**Table J-58. IRT Parameters for Polytomous Items—ELA Grade 8**

Item Number	Parameters and Measures of Standard Error															
	a	SE (a)	b	SE (b)	d0	SE (d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA01534	0.38856	0.00494	0.26112	0.07914	0.47839	0.01696	-0.47839	0.01817	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01567	0.49497	0.00561	0.62355	0.07759	0.25595	0.01402	-0.25595	0.01569	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01568A	1.19429	0.01261	-0.80081	0.07634	1.18009	0.01863	-0.00095	0.01272	-1.17914	0.01172	0.00000	0.00000	n/a	n/a	n/a	n/a
IA01568D	1.16072	0.01107	0.40274	0.07629	2.46368	0.01893	1.21653	0.01298	0.06267	0.01169	-1.29536	0.01593	-2.44751	0.02605	0.00000	0.00000
IA01583A	1.08957	0.01138	-0.66298	0.07660	1.23421	0.01895	0.08058	0.01315	-1.31479	0.01269	0.00000	0.00000	n/a	n/a	n/a	n/a
IA01583D	1.03989	0.01009	0.36522	0.07782	3.06675	0.02630	1.31409	0.01479	-0.17800	0.01328	-1.50359	0.01846	-2.79925	0.03010	0.00000	0.00000
IA01769	0.47196	0.00510	-0.80397	0.08098	1.06913	0.02419	-1.06913	0.01663	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01889	0.59398	0.00587	-0.02121	0.07643	0.47822	0.01305	-0.47822	0.01268	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01898	0.62183	0.00597	-1.33985	0.08003	0.99583	0.02263	-0.99583	0.01477	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA01899A	1.19728	0.01225	-0.29050	0.07570	1.30923	0.01598	-0.02425	0.01133	-1.28499	0.01246	0.00000	0.00000	n/a	n/a	n/a	n/a
IA01899D	1.20881	0.01174	0.90976	0.07679	2.24070	0.01488	1.14964	0.01192	-0.03563	0.01280	-1.11253	0.01799	-2.24218	0.03114	0.00000	0.00000
IA01967	0.47979	0.00530	-1.67150	0.08919	1.98714	0.04366	-1.98714	0.02326	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a



**Table J-59. IRT Parameters for Polytomous Items—ELA Grade 10**

Item Number	Parameters and Measures of Standard Error															
	a	SE (a)	b	SE (b)	d0	SE (d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA01785A	1.12475	0.01323	-1.45383	0.00985	0.00000	0.00000	1.01987	0.02594	0.07687	0.01778	-1.09673	0.01321	0.00000	0.00000		
IA01407A	1.13874	0.01287	-1.21920	0.00909	0.00000	0.00000	1.11710	0.02417	0.04320	0.01586	-1.16030	0.01244	0.00000	0.00000		
IA01785D	1.06479	0.01105	-0.31972	0.00790	0.00000	0.00000	2.30638	0.02650	1.26908	0.01704	0.11388	0.01220	-1.05432	0.01306	-2.63502	0.02366
IA01407D	1.13668	0.01170	-0.12272	0.00738	0.00000	0.00000	2.31408	0.02416	1.17448	0.01495	-0.01082	0.01126	-1.00182	0.01292	-2.47592	0.02311
IA01775	1.02816	0.01064	-1.17200	0.00719	0.00000	0.00000	0.12030	0.01289	-0.12030	0.01199	0.00000	0.00000				
IA01803	0.46696	0.00564	-1.06205	0.01329	0.00000	0.00000	0.94655	0.02752	-0.94655	0.01738	0.00000	0.00000				
IA01420	0.69636	0.00658	-0.45760	0.00792	0.00000	0.00000	0.91260	0.01514	-0.91260	0.01214	0.00000	0.00000				
IA01404	0.69165	0.00670	-1.08790	0.01032	0.00000	0.00000	1.19460	0.02144	-1.19460	0.01337	0.00000	0.00000				
IA01637	0.88319	0.01023	-1.86480	0.01195	0.00000	0.00000	0.19200	0.02211	-0.19200	0.01918	0.00000	0.00000				
IA01641	0.88883	0.00905	-2.43740	0.01870	0.00000	0.00000	1.32840	0.04048	-1.32840	0.02145	0.00000	0.00000				
IA01764	0.98042	0.00947	-1.09075	0.00706	0.00000	0.00000	0.27345	0.01324	-0.27345	0.01113	0.00000	0.00000				

**Table J-60. IRT Parameters for Polytomous Items—Mathematics Grade 3**

Item Number	Parameters and Measures of Standard Error															
	a	SE (a)	b	SE (b)	d0	SE (d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA02160	0.87953	0.00772	0.31626	0.15513	1.26777	0.01244	-0.44919	0.01058	-0.81858	0.01184	0.00000	0.00000	n/a	n/a	n/a	n/a
IA02687	1.11890	0.00952	0.95803	0.15516	1.11920	0.00941	-0.25192	0.01110	-0.86728	0.01413	0.00000	0.00000	n/a	n/a	n/a	n/a
IA02688	1.11680	0.00934	0.52092	0.15410	0.86335	0.00904	-0.25346	0.00929	-0.60989	0.01040	0.00000	0.00000	n/a	n/a	n/a	n/a
IA02960	1.10812	0.00910	-0.23871	0.15417	0.81747	0.01114	0.02163	0.00891	-0.83910	0.00899	0.00000	0.00000	n/a	n/a	n/a	n/a

**Table J-61. IRT Parameters for Polytomous Items—Mathematics Grade 4**

Item Number	Parameters and Measures of Standard Error															
	a	SE (a)	b	SE (b)	d0	SE (d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA02457	0.96810	0.00764	-0.10903	0.18554	1.52760	0.01539	0.90942	0.01208	-0.53205	0.00932	-1.90497	0.01393	0.00000	0.00000	n/a	n/a
IA02591	1.04540	0.00845	0.10415	0.18546	2.01924	0.01766	0.08864	0.00920	-0.56429	0.00942	-1.54359	0.01271	0.00000	0.00000	n/a	n/a
IA02742	0.61249	0.00664	-0.77163	0.19146	1.10355	0.02423	-1.10355	0.01523	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA02895	1.02161	0.00814	-0.76390	0.18517	1.08291	0.01588	0.48484	0.01233	-0.25957	0.00964	-1.30818	0.00925	0.00000	0.00000	n/a	n/a
IA02901	1.11332	0.01089	-1.07320	0.18773	0.52482	0.01585	-0.52482	0.01134	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA04568	1.07557	0.00839	0.21220	0.18479	1.56622	0.01294	0.76021	0.00959	-0.91776	0.00999	-1.40867	0.01199	0.00000	0.00000	n/a	n/a

**Table J-62. IRT Parameters for Polytomous Items—Mathematics Grade 5**

Item Number	Parameters and Measures of Standard Error															
	a	SE (a)	b	SE (b)	d0	SE (d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA01156	0.77064	0.00709	-0.09622	0.11588	0.95777	0.01441	-0.95777	0.01253	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA02397	1.21599	0.00929	-0.41254	0.11193	0.82061	0.01045	0.24082	0.00843	-0.21798	0.00759	-0.84345	0.00767	0.00000	0.00000	n/a	n/a
IA02928	0.79674	0.00721	0.25377	0.11503	0.78424	0.01155	-0.78424	0.01250	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA02929	1.13750	0.00825	-0.19934	0.11258	1.43011	0.01274	0.53355	0.00908	-0.73286	0.00834	-1.23081	0.00950	0.00000	0.00000	n/a	n/a
IA04525	0.99713	0.00746	0.23978	0.11309	1.47485	0.01188	0.57560	0.00902	-0.39279	0.00910	-1.65766	0.01400	0.00000	0.00000	n/a	n/a
IA04631	1.05851	0.00819	-0.28560	0.11233	0.95082	0.01149	0.43873	0.00938	-0.46821	0.00804	-0.92134	0.00870	0.00000	0.00000	n/a	n/a

**Table J-63. IRT Parameters for Polytomous Items—Mathematics Grade 6**

Item Number	Parameters and Measures of Standard Error															
	a	SE (a)	b	SE (b)	d0	SE (d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA02702	0.56352	0.00573	0.70514	0.18659	0.96375	0.01487	-0.96375	0.01882	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA02705	1.06556	0.00788	-0.69466	0.18205	1.19278	0.01524	0.49551	0.01162	-0.15853	0.00955	-1.52975	0.00964	0.00000	0.00000	n/a	n/a
IA02706	1.18295	0.00862	0.25854	0.18077	1.01776	0.00957	0.26026	0.00800	-0.22522	0.00809	-1.05280	0.00976	0.00000	0.00000	n/a	n/a
IA02894	1.24442	0.00919	0.21057	0.18074	0.89981	0.00928	0.33399	0.00817	-0.19876	0.00808	-1.03505	0.00965	0.00000	0.00000	n/a	n/a
IA02908	0.68493	0.00641	-0.29930	0.18718	1.43482	0.02010	-1.43482	0.01557	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA04565	1.39634	0.00975	0.26857	0.18074	1.33143	0.00984	0.35302	0.00772	-0.60363	0.00817	-1.08082	0.00937	0.00000	0.00000	n/a	n/a

**Table J-64. IRT Parameters for Polytomous Items—Mathematics Grade 7**

Item Number	Parameters and Measures of Standard Error															
	a	SE (a)	b	SE (b)	d0	SE (d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA01106	0.95642	0.00765	0.22488	0.09684	1.05195	0.01169	-1.05195	0.01222	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA02718	0.85901	0.00727	-0.56616	0.09720	0.71571	0.01405	-0.71571	0.01090	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA02723	1.18036	0.00835	0.40062	0.09396	0.96819	0.00878	0.30353	0.00793	-0.15877	0.00831	-1.11295	0.01076	0.00000	0.00000	n/a	n/a
IA02910	1.44445	0.00987	-0.27158	0.09419	1.35130	0.01144	0.55668	0.00879	-0.30309	0.00777	-1.60488	0.00966	0.00000	0.00000	n/a	n/a
IA04616	1.14891	0.00803	-0.60028	0.09462	1.30073	0.01342	0.49560	0.01014	-0.39430	0.00846	-1.40203	0.00920	0.00000	0.00000	n/a	n/a
IA04642	1.30153	0.00922	0.61838	0.09401	0.99507	0.00823	0.30949	0.00786	-0.20050	0.00852	-1.10406	0.01138	0.00000	0.00000	n/a	n/a

**Table J-65. IRT Parameters for Polytomous Items—Mathematics Grade 8**

Item Number	Parameters and Measures of Standard Error															
	a	SE (a)	b	SE (b)	d0	SE (d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA02757	1.03824	0.00875	-1.22670	0.05693	0.95450	0.01878	-0.95450	0.01171	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA02760	0.72143	0.00647	0.84923	0.05608	0.82380	0.01194	-0.82380	0.01611	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA02765	1.58948	0.01124	-0.62110	0.05167	0.89225	0.01053	0.15112	0.00817	-0.30812	0.00745	-0.73526	0.00718	0.00000	0.00000	n/a	n/a
IA04609	1.70317	0.01164	-0.05638	0.05158	1.37064	0.01011	0.18787	0.00722	-0.52883	0.00722	-1.02968	0.00804	0.00000	0.00000	n/a	n/a
IA04611	1.16409	0.00812	0.45646	0.05279	1.78730	0.01126	0.31922	0.00840	-0.55764	0.00962	-1.54888	0.01374	0.00000	0.00000	n/a	n/a
IA04717	1.27085	0.00857	0.05923	0.05230	1.65582	0.01182	0.29510	0.00804	-0.53983	0.00830	-1.41109	0.01068	0.00000	0.00000	n/a	n/a

**Table J-66. 2018 IRT Parameters for Polytomous Items—Mathematics Grade 10**

Item Number	Parameters and Measures of Standard Error															
	a	SE (a)	b	SE (b)	d0	SE (d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA02854	0.73298	0.00664	-0.23800	0.00720	0.00000	0.00000	0.78540	0.01315	-0.78540	0.01176	0.00000	0.00000				
IA02846	1.08560	0.00899	-0.81505	0.00639	0.00000	0.00000	0.58395	0.01246	-0.58395	0.00948	0.00000	0.00000				
IA02837	0.84315	0.00705	0.01330	0.00636	0.00000	0.00000	0.72270	0.01110	-0.72270	0.01094	0.00000	0.00000				
IA02864	0.81152	0.00782	-1.92380	0.01262	0.00000	0.00000	0.90540	0.02615	-0.90540	0.01648	0.00000	0.00000				
IA02835	1.17402	0.00917	0.08465	0.00548	0.00000	0.00000	0.76255	0.00937	-0.76255	0.00962	0.00000	0.00000				
IA02807	1.03674	0.00852	-0.76925	0.00676	0.00000	0.00000	0.69055	0.01334	-0.69055	0.00980	0.00000	0.00000				
IA04586	1.33604	0.00882	0.35330	0.00428	0.00000	0.00000	1.54210	0.00979	0.41880	0.00753	-0.54460	0.00864	-1.41630	0.01180	0.00000	0.00000
IA04574	1.36061	0.00923	-0.14008	0.00401	0.00000	0.00000	1.46963	0.01115	0.24153	0.00764	-0.50988	0.00755	-1.20128	0.00904	0.00000	0.00000
IA02855	1.32381	0.00911	0.02210	0.00464	0.00000	0.00000	1.41740	0.01066	0.68000	0.00840	-0.13180	0.00783	-1.96560	0.01362	0.00000	0.00000
IA04546	1.66902	0.01182	-0.02095	0.00313	0.00000	0.00000	0.70385	0.00740	0.18475	0.00668	-0.23475	0.00668	-0.65385	0.00721	0.00000	0.00000

**Table J-67. IRT Parameters for Polytomous Items—STE Grade 5**

Item Number	Parameters and Measures of Standard Error															
	a	SE (a)	b	SE (b)	d0	SE (d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA03312	0.77984	0.00770	-1.42950	0.01076	0.00000	0.00000	0.92040	0.02236	-0.92040	0.01397	0.00000	0.00000			IA03312	0.77984
IA03144	0.66790	0.00676	-1.54390	0.01536	0.00000	0.00000	1.57090	0.03308	-1.57090	0.01790	0.00000	0.00000			IA03144	0.66790
IA03177	0.32275	0.00523	-0.22645	0.02583	0.00000	0.00000	2.12825	0.04753	-2.12825	0.04175	0.00000	0.00000			IA03177	0.32275
IA03234	0.50464	0.00588	0.51365	0.01387	0.00000	0.00000	1.48245	0.02058	-1.48245	0.02703	0.00000	0.00000			IA03234	0.50464
IA03275	0.54327	0.00635	-2.15960	0.02111	0.00000	0.00000	1.70170	0.04585	-1.70170	0.02389	0.00000	0.00000			IA03275	0.54327
IA03300	0.78989	0.00688	-0.21127	0.00812	0.00000	0.00000	1.84213	0.01857	0.09963	0.01168	-1.94177	0.01758	0.00000	0.00000	IA03300	0.78989
IA03146	0.76896	0.00682	-0.91217	0.00795	0.00000	0.00000	1.54543	0.02069	0.03253	0.01301	-1.57797	0.01270	0.00000	0.00000	IA03146	0.76896
IA03259	0.74556	0.00694	0.48427	0.00756	0.00000	0.00000	1.32677	0.01310	0.10967	0.01168	-1.43643	0.01943	0.00000	0.00000	IA03259	0.74556
IA03158	0.80917	0.00747	1.31070	0.00961	0.00000	0.00000	1.71950	0.01303	-0.22940	0.01657	-1.49010	0.02576	0.00000	0.00000	IA03158	0.80917

**Table J-68. IRT Parameters for Polytomous Items—STE Grade 8**

Item Number	Parameters and Measures of Standard Error															
	a	SE (a)	b	SE (b)	d0	SE (d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA03213	0.71623	0.00676	-0.74485	0.00957	0.00000	0.00000	1.09295	0.01942	-1.09295	0.01314	0.00000	0.00000			IA03213	0.71623
IA03219	0.67061	0.00641	-1.11510	0.01051	0.00000	0.00000	0.91190	0.02171	-0.91190	0.01384	0.00000	0.00000			IA03219	0.67061
IA03253	0.46549	0.00558	0.69180	0.01481	0.00000	0.00000	1.47060	0.02052	-1.47060	0.02992	0.00000	0.00000			IA03253	0.46549
IA03379	0.73851	0.00694	0.54565	0.00888	0.00000	0.00000	1.08975	0.01300	-1.08975	0.01743	0.00000	0.00000			IA03379	0.73851
IA03217	0.66890	0.00653	-0.59615	0.00916	0.00000	0.00000	1.01385	0.01809	-1.01385	0.01327	0.00000	0.00000			IA03217	0.66890
IA03271	0.60658	0.00582	-0.23320	0.01003	0.00000	0.00000	2.06920	0.02309	0.06270	0.01388	-2.13190	0.02193	0.00000	0.00000	IA03271	0.60658
IA03243	0.89159	0.00735	0.83293	0.00765	0.00000	0.00000	1.71623	0.01235	-0.04817	0.01189	-1.66807	0.02020	0.00000	0.00000	IA03243	0.89159
IA03110	1.00165	0.00829	1.01323	0.00685	0.00000	0.00000	1.31233	0.01016	-0.07767	0.01171	-1.23467	0.01796	0.00000	0.00000	IA03110	1.00165
IA03214	0.94638	0.00764	0.27477	0.00637	0.00000	0.00000	1.47137	0.01211	0.08977	0.00976	-1.56113	0.01566	0.00000	0.00000	IA03214	0.94638
IA03213	0.71623	0.00676	-0.74485	0.00957	0.00000	0.00000	1.09295	0.01942	-1.09295	0.01314	0.00000	0.00000			IA03213	0.71623