

APPENDIX E

DELTA AND RESCORE ANALYSES TABLES

I. Delta Analyses Tables.....3

All of the delta analyses tables (tables E-1 through E-14) use the following abbreviations in column headings:

IREF	=	internal reference number for each item
OLDP	=	2008 item difficulty index
NEWP	=	2009 item difficulty index
OLD DELTA	=	2008 delta value
NEW DELTA	=	2009 delta value
LINE	=	regression line
MAX	=	maximum number of raw score points
DISCARD	=	whether or not the item was discarded from use as an equating item; “NO” is the default
ST DEV	=	standard deviation from line

II. Rescore Analyses Tables27

Delta Analyses

English Language Arts

Table E-1. 2009 MCAS: Delta Analyses—English Language Arts Grade 3

<i>IREF</i>	<i>OLDP</i>	<i>NEWP</i>	<i>OLD DELTA</i>	<i>NEW DELTA</i>	<i>LINE</i>	<i>MAX</i>	<i>DISCARD</i>	<i>ST DEV FROM LINE</i>
214091	0.76	0.76	10.175	10.175	10.276	1	NO	-0.427
214092	0.95	0.95	6.421	6.421	6.506	1	NO	-0.591
214093	0.93	0.92	7.097	7.380	7.469	1	NO	2.215
214094	0.70	0.74	10.902	10.427	10.529	1	NO	2.224
214100	0.80	0.82	9.634	9.339	9.436	1	NO	0.506
214101	0.84	0.84	9.022	9.022	9.119	1	NO	-0.477
214102	0.58	0.58	12.192	12.192	12.303	1	NO	-0.339
214103	0.79	0.80	9.774	9.634	9.733	1	NO	-1.014
214104	0.81	0.82	9.488	9.339	9.436	1	NO	-0.912
214105	0.61	0.63	11.883	11.673	11.781	1	NO	-0.425
214106	0.83	0.83	9.183	9.183	9.281	1	NO	-0.470
214107	0.94	0.94	6.781	6.781	6.867	1	NO	-0.575
214108	2.72	2.74	11.129	11.073	11.179	4	NO	-0.936
220171	0.85	0.86	8.854	8.679	8.774	1	NO	-0.632
220175	0.76	0.77	10.175	10.045	10.146	1	NO	-1.135
220181	0.74	0.75	10.427	10.302	10.404	1	NO	-1.201
220185	0.83	0.83	9.183	9.183	9.281	1	NO	-0.470
220194	0.71	0.70	10.786	10.902	11.007	1	NO	0.737
220196	0.75	0.74	10.302	10.427	10.529	1	NO	0.801
220199	0.81	0.80	9.488	9.634	9.733	1	NO	0.967
220220	0.80	0.80	9.634	9.634	9.733	1	NO	-0.450
220259	2.07	2.05	12.825	12.875	12.988	4	NO	0.181
231813	0.84	0.86	9.022	8.679	8.774	1	NO	1.008
231821	0.69	0.68	11.017	11.129	11.235	1	NO	0.715
231823	0.76	0.78	10.175	9.911	10.012	1	NO	0.174
231828	0.54	0.55	12.598	12.497	12.609	1	NO	-1.311
231830	1.33	1.42	14.732	14.487	14.608	4	NO	-0.211
234878	0.66	0.68	11.350	11.129	11.235	1	NO	-0.296
234879	0.81	0.82	9.488	9.339	9.436	1	NO	-0.912
234880	0.87	0.89	8.494	8.094	8.186	1	NO	1.591
234882	0.87	0.87	8.494	8.494	8.589	1	NO	-0.500
234890	0.87	0.89	8.494	8.094	8.186	1	NO	1.591
234894	0.80	0.81	9.634	9.488	9.587	1	NO	-0.965
234896	0.80	0.79	9.634	9.774	9.874	1	NO	0.931
234897	0.87	0.89	8.494	8.094	8.186	1	NO	1.591
234903	2.34	2.40	12.141	11.987	12.096	4	NO	-0.981

Table E-2. 2009 MCAS: Delta Analyses—English Language Arts Grade 4

<i>IREF</i>	<i>OLDP</i>	<i>NEWP</i>	<i>OLD DELTA</i>	<i>NEW DELTA</i>	<i>LINE</i>	<i>MAX</i>	<i>DISCARD</i>	<i>ST DEV FROM LINE</i>
225937	0.69	0.69	11.017	11.017	11.157	1	NO	-0.050
225944	0.77	0.78	10.045	9.911	10.061	1	NO	-1.085
225949	0.69	0.69	11.017	11.017	11.157	1	NO	-0.050
225967	1.94	2.11	13.150	12.724	12.850	4	NO	1.285
227630	0.84	0.86	9.022	8.679	8.839	1	NO	0.304
227631	0.82	0.84	9.339	9.022	9.180	1	NO	0.102
227640	0.80	0.81	9.634	9.488	9.642	1	NO	-1.152
227641	0.87	0.87	8.494	8.494	8.657	1	NO	0.130
227644	0.80	0.81	9.634	9.488	9.642	1	NO	-1.152
227649	0.76	0.79	10.175	9.774	9.926	1	NO	0.858
227651	0.87	0.89	8.494	8.094	8.259	1	NO	0.739
227653	0.87	0.88	8.494	8.300	8.464	1	NO	-0.968
227656	0.78	0.80	9.911	9.634	9.786	1	NO	-0.177
227657	0.90	0.91	7.874	7.637	7.806	1	NO	-0.661
227658	0.75	0.75	10.302	10.302	10.449	1	NO	0.001
227660	2.07	2.18	12.824	12.548	12.675	4	NO	0.022
227667	1.90	1.88	13.251	13.301	13.422	4	NO	0.207
228178	0.73	0.74	10.549	10.427	10.572	1	NO	-1.027
228192	0.76	0.77	10.175	10.045	10.193	1	NO	-1.067
228201	0.81	0.79	9.488	9.774	9.926	1	NO	2.427
228205	0.84	0.85	9.022	8.854	9.013	1	NO	-1.149
228215	0.80	0.81	9.634	9.488	9.642	1	NO	-1.152
228225	0.89	0.90	8.094	7.874	8.041	1	NO	-0.783
228265	0.66	0.67	11.350	11.240	11.379	1	NO	-0.982
228276	0.74	0.74	10.427	10.427	10.572	1	NO	-0.007
228278	0.64	0.62	11.566	11.778	11.912	1	NO	1.666
228281	1.80	1.94	13.503	13.150	13.273	4	NO	0.696
228290	0.67	0.65	11.240	11.459	11.596	1	NO	1.743
244109	0.63	0.64	11.673	11.566	11.702	1	NO	-0.977
244112	0.67	0.65	11.240	11.459	11.596	1	NO	1.743
244114	2.07	2.24	12.825	12.396	12.525	4	NO	1.278
244118	0.61	0.63	11.883	11.673	11.808	1	NO	-0.596
244260	0.76	0.78	10.175	9.911	10.061	1	NO	-0.275
256081	0.80	0.80	9.634	9.634	9.786	1	NO	0.049
256084	0.84	0.87	9.022	8.494	8.657	1	NO	1.830
256149	0.71	0.73	10.787	10.549	10.693	1	NO	-0.446
256164	0.70	0.71	10.902	10.787	10.929	1	NO	-1.001
256173	0.75	0.77	10.302	10.045	10.194	1	NO	-0.317
256184	0.65	0.66	11.459	11.350	11.488	1	NO	-0.980
256192	0.85	0.84	8.854	9.022	9.180	1	NO	1.495
256212	1.80	1.89	13.503	13.276	13.397	4	NO	-0.343
256807	0.78	0.80	9.911	9.634	9.786	1	NO	-0.177

Table E-3. 2009 MCAS: Delta Analyses—English Language Arts Grade 5

<i>IREF</i>	<i>OLDP</i>	<i>NEWP</i>	<i>OLD DELTA</i>	<i>NEW DELTA</i>	<i>LINE</i>	<i>MAX</i>	<i>DISCARD</i>	<i>ST DEV FROM LINE</i>
205081	0.74	0.71	10.427	10.787	10.898	1	NO	1.777
205084	0.57	0.57	12.295	12.295	12.444	1	NO	-0.427
205090	0.85	0.88	8.854	8.300	8.348	1	NO	2.020
205091	0.62	0.63	11.778	11.673	11.807	1	NO	-1.260
205093	0.63	0.63	11.673	11.673	11.807	1	NO	-0.536
205102	2.12	2.36	12.699	12.090	12.235	4	NO	1.730
205133	0.66	0.69	11.350	11.017	11.134	1	NO	0.028
205134	0.58	0.60	12.192	11.987	12.129	1	NO	-1.019
205136	0.77	0.80	10.045	9.634	9.715	1	NO	0.804
205139	0.85	0.88	8.854	8.300	8.348	1	NO	2.020
205143	0.76	0.74	10.175	10.427	10.529	1	NO	0.972
205147	0.72	0.76	10.669	10.175	10.270	1	NO	1.276
205148	0.67	0.67	11.240	11.240	11.363	1	NO	-0.612
205153	1.96	2.11	13.100	12.724	12.885	4	NO	0.021
208721	0.70	0.68	10.902	11.129	11.249	1	NO	0.924
208722	0.86	0.86	8.679	8.679	8.736	1	NO	-1.063
208726	0.73	0.75	10.549	10.302	10.401	1	NO	-0.442
208735	0.73	0.74	10.549	10.427	10.529	1	NO	-1.319
208738	0.73	0.71	10.549	10.786	10.898	1	NO	0.939
208741	0.80	0.79	9.634	9.774	9.860	1	NO	0.096
208743	0.82	0.84	9.339	9.022	9.088	1	NO	0.261
208744	0.82	0.83	9.339	9.183	9.254	1	NO	-0.873
208765	2.53	2.60	11.646	11.459	11.587	4	NO	-1.053
208783	0.69	0.69	11.017	11.017	11.134	1	NO	-0.652
208784	0.83	0.82	9.183	9.339	9.413	1	NO	0.118
224762	0.79	0.78	9.774	9.911	10.000	1	NO	0.093
224773	0.72	0.74	10.669	10.427	10.529	1	NO	-0.496
224804	0.68	0.68	11.129	11.129	11.249	1	NO	-0.632
224807	0.92	0.91	7.380	7.637	7.668	1	NO	0.519
224817	2.05	2.17	12.875	12.573	12.730	4	NO	-0.465
224840	0.78	0.81	9.911	9.488	9.566	1	NO	0.909
224846	0.75	0.76	10.302	10.175	10.270	1	NO	-1.239
224854	0.71	0.74	10.786	10.427	10.529	1	NO	0.312
224858	0.79	0.78	9.774	9.911	10.000	1	NO	0.093
224867	1.90	1.97	13.251	13.075	13.245	4	NO	-1.417
242303	0.72	0.71	10.669	10.786	10.898	1	NO	0.116
242304	0.84	0.84	9.022	9.022	9.088	1	NO	-1.002
242324	0.76	0.76	10.175	10.175	10.270	1	NO	-0.800
242325	0.77	0.79	10.045	9.774	9.860	1	NO	-0.187
242326	0.81	0.78	9.488	9.911	10.000	1	NO	2.055
250901	0.82	0.83	9.339	9.183	9.254	1	NO	-0.873
255425	2.14	2.16	12.649	12.598	12.756	4	NO	-0.719

Table E-4. 2009 MCAS: Delta Analyses—English Language Arts Grade 6

<i>IREF</i>	<i>OLDP</i>	<i>NEWP</i>	<i>OLD DELTA</i>	<i>NEW DELTA</i>	<i>LINE</i>	<i>MAX</i>	<i>DISCARD</i>	<i>ST DEV FROM LINE</i>
203337	0.73	0.74	10.549	10.427	10.500	1	NO	-0.693
203340	0.86	0.86	8.679	8.679	8.688	1	NO	-0.992
203348	0.76	0.77	10.175	10.045	10.104	1	NO	-0.527
207292	0.73	0.74	10.549	10.427	10.500	1	NO	-0.693
207306	0.75	0.76	10.302	10.175	10.239	1	NO	-0.585
207307	0.66	0.67	11.350	11.240	11.343	1	NO	-1.010
207311	0.64	0.63	11.566	11.673	11.792	1	NO	0.634
207313	0.81	0.83	9.488	9.183	9.211	1	NO	1.025
207320	0.87	0.85	8.494	8.854	8.870	1	NO	1.761
207339	2.13	2.23	12.674	12.421	12.568	4	NO	-0.265
207360	2.46	2.47	11.831	11.804	11.928	4	NO	-0.327
207439	0.79	0.78	9.774	9.911	9.966	1	NO	0.377
207446	0.83	0.82	9.183	9.339	9.372	1	NO	0.357
207448	0.83	0.82	9.183	9.339	9.372	1	NO	0.357
207449	0.67	0.67	11.240	11.240	11.343	1	NO	-0.285
207450	0.91	0.91	7.637	7.637	7.608	1	NO	-0.841
207455	0.44	0.46	13.604	13.402	13.584	1	NO	-0.912
207464	0.89	0.89	8.094	8.094	8.082	1	NO	-0.967
207473	0.83	0.83	9.183	9.183	9.211	1	NO	-0.853
207479	0.79	0.79	9.774	9.774	9.824	1	NO	-0.690
207484	0.85	0.85	8.854	8.854	8.870	1	NO	-0.943
207497	0.79	0.77	9.774	10.045	10.104	1	NO	1.416
207508	2.05	2.21	12.875	12.472	12.620	4	NO	0.851
207576	0.75	0.74	10.302	10.427	10.500	1	NO	0.426
207578	0.67	0.68	11.240	11.129	11.228	1	NO	-0.969
207670	2.33	2.29	12.167	12.269	12.410	4	NO	0.766
207783	0.55	0.56	12.497	12.396	12.542	1	NO	-0.727
244965	0.79	0.83	9.774	9.183	9.211	1	YES	3.173
244966	0.69	0.71	11.017	10.786	10.873	1	NO	0.020
245042	0.87	0.88	8.494	8.300	8.295	1	NO	0.436
245080	0.62	0.61	11.778	11.883	12.009	1	NO	0.678
245081	0.54	0.54	12.598	12.598	12.751	1	NO	0.089
245083	0.61	0.62	11.883	11.778	11.901	1	NO	-0.923
245085	2.25	2.29	12.371	12.269	12.410	4	NO	-0.766
245090	0.61	0.67	11.883	11.240	11.343	1	NO	2.992
250602	0.74	0.76	10.427	10.175	10.239	1	NO	0.351
250603	0.60	0.63	11.987	11.673	11.792	1	NO	0.406
250604	2.54	2.59	11.620	11.620	11.737	4	NO	-0.181
250705	0.67	0.69	11.240	11.017	11.112	1	NO	-0.092
250746	0.57	0.58	12.295	12.192	12.331	1	NO	-0.790
250747	0.72	0.72	10.669	10.669	10.751	1	NO	-0.443
255205	0.74	0.75	10.427	10.302	10.371	1	NO	-0.640

Table E-5. 2009 MCAS: Delta Analyses—English Language Arts Grade 7

<i>IREF</i>	<i>OLDP</i>	<i>NEWP</i>	<i>OLD DELTA</i>	<i>NEW DELTA</i>	<i>LINE</i>	<i>MAX</i>	<i>DISCARD</i>	<i>ST DEV FROM LINE</i>
224900	0.82	0.83	9.339	9.183	9.312	1	NO	-1.017
224909	0.69	0.71	11.017	10.786	11.007	1	NO	-1.149
224911	0.78	0.79	9.911	9.774	9.937	1	NO	-1.026
224913	0.74	0.77	10.427	10.045	10.223	1	NO	0.326
224918	2.46	2.61	11.831	11.432	11.690	4	NO	-0.153
224946	0.86	0.88	8.679	8.300	8.378	1	NO	1.062
224951	0.69	0.70	11.017	10.902	11.130	1	NO	-0.362
224954	0.93	0.94	7.097	6.781	6.771	1	NO	1.250
224955	0.75	0.75	10.302	10.302	10.495	1	NO	0.241
224999	0.60	0.62	11.987	11.778	12.056	1	NO	-0.694
225000	0.73	0.76	10.549	10.175	10.360	1	NO	0.208
225004	0.72	0.75	10.669	10.302	10.495	1	NO	0.096
225008	0.70	0.68	10.902	11.129	11.370	1	NO	2.321
225044	0.92	0.90	7.380	7.874	7.927	1	NO	2.924
225050	0.70	0.73	10.902	10.549	10.756	1	NO	-0.109
225051	0.68	0.70	11.129	10.902	11.130	1	NO	-1.215
225055	2.08	2.13	12.799	12.674	13.003	4	NO	0.325
225545	0.80	0.79	9.634	9.774	9.937	1	NO	1.077
225550	0.81	0.83	9.488	9.183	9.312	1	NO	0.119
225593	0.70	0.75	10.902	10.302	10.495	1	NO	1.867
225596	0.75	0.75	10.302	10.302	10.495	1	NO	0.241
225597	2.11	2.28	12.724	12.295	12.602	4	NO	-0.297
225618	0.73	0.75	10.549	10.302	10.495	1	NO	-0.812
225621	0.78	0.78	9.911	9.911	10.082	1	NO	0.071
225625	0.62	0.64	11.778	11.566	11.832	1	NO	-0.812
225630	0.82	0.82	9.339	9.339	9.476	1	NO	-0.180
225631	0.87	0.88	8.494	8.300	8.378	1	NO	-0.334
225661	0.79	0.79	9.774	9.774	9.937	1	NO	0.011
225663	0.75	0.76	10.302	10.175	10.360	1	NO	-0.778
225664	0.83	0.83	9.183	9.183	9.312	1	NO	-0.247
225665	0.60	0.67	11.987	11.240	11.487	1	NO	2.563
225667	2.16	2.31	12.598	12.218	12.521	4	NO	-0.637
225678	0.81	0.83	9.488	9.183	9.312	1	NO	0.119
225679	0.66	0.68	11.350	11.129	11.370	1	NO	-1.072
225700	0.82	0.83	9.339	9.183	9.312	1	NO	-1.017
225707	2.22	2.34	12.447	12.141	12.440	4	NO	-1.169
233976	0.84	0.84	9.022	9.022	9.141	1	NO	-0.318
233987	0.74	0.75	10.427	10.302	10.495	1	NO	-0.703
233993	0.77	0.79	10.045	9.774	9.937	1	NO	-0.403
234003	0.76	0.78	10.175	9.911	10.082	1	NO	-0.514
234009	2.25	2.30	12.371	12.244	12.548	4	NO	0.125
273055	0.78	0.78	9.911	9.911	10.082	1	NO	0.071

Table E-6. 2009 MCAS: Delta Analyses—English Language Arts Grade 8

<i>IREF</i>	<i>OLDP</i>	<i>NEWP</i>	<i>OLD DELTA</i>	<i>NEW DELTA</i>	<i>LINE</i>	<i>MAX</i>	<i>DISCARD</i>	<i>ST DEV FROM LINE</i>
204169	0.82	0.83	9.339	9.183	9.359	1	NO	-1.082
204172	0.74	0.73	10.427	10.549	10.736	1	NO	1.721
204175	0.76	0.77	10.175	10.045	10.228	1	NO	-0.768
204185	2.03	2.21	12.925	12.472	12.676	4	NO	1.129
207096	0.72	0.71	10.669	10.787	10.976	1	NO	1.699
207099	0.84	0.84	9.022	9.022	9.197	1	NO	0.410
207101	0.84	0.85	9.022	8.854	9.027	1	NO	-1.232
207118	0.69	0.71	11.017	10.787	10.976	1	NO	-0.889
207124	2.07	2.29	12.825	12.396	12.600	4	NO	0.899
207159	0.86	0.87	8.679	8.494	8.664	1	NO	-1.143
207176	0.82	0.84	9.339	9.022	9.197	1	NO	0.094
207180	0.59	0.60	12.090	11.987	12.187	1	NO	-0.344
207185	0.58	0.58	12.192	12.192	12.394	1	NO	0.674
207193	2.42	2.48	11.935	11.778	11.976	4	NO	-0.880
207202	0.88	0.89	8.300	8.094	8.260	1	NO	-0.897
207205	0.57	0.59	12.295	12.090	12.291	1	NO	-1.244
207207	0.86	0.87	8.679	8.494	8.664	1	NO	-1.142
207216	0.71	0.72	10.787	10.669	10.857	1	NO	-0.596
207219	0.66	0.69	11.350	11.017	11.208	1	NO	0.095
207222	0.77	0.79	10.045	9.774	9.955	1	NO	-0.415
207225	0.75	0.75	10.302	10.302	10.487	1	NO	0.516
207246	0.79	0.83	9.774	9.183	9.359	1	NO	2.743
207248	2.59	2.78	11.486	10.960	11.151	4	NO	1.965
207589	0.79	0.81	9.774	9.488	9.667	1	NO	-0.240
207592	0.70	0.71	10.902	10.787	10.976	1	NO	-0.568
207595	0.84	0.85	9.022	8.854	9.027	1	NO	-1.232
207598	0.83	0.84	9.183	9.022	9.197	1	NO	-1.153
207599	0.79	0.81	9.774	9.488	9.667	1	NO	-0.240
207600	0.73	0.74	10.549	10.427	10.613	1	NO	-0.658
207618	0.69	0.68	11.017	11.129	11.322	1	NO	1.677
207624	0.79	0.79	9.774	9.774	9.955	1	NO	0.472
207639	2.64	2.76	11.350	11.017	11.208	4	NO	0.095
227758	0.76	0.77	10.175	10.045	10.228	1	NO	-0.768
227759	0.72	0.73	10.669	10.549	10.736	1	NO	-0.626
227764	0.94	0.95	6.781	6.421	6.573	1	NO	0.737
227769	0.89	0.89	8.094	8.094	8.260	1	NO	0.332
227773	0.70	0.70	10.902	10.902	11.093	1	NO	0.566
227774	0.81	0.83	9.488	9.183	9.359	1	NO	-0.029
227777	0.70	0.72	10.902	10.669	10.857	1	NO	-0.844
227781	0.56	0.60	12.396	11.987	12.187	1	NO	0.750
227783	2.41	2.53	11.961	11.646	11.843	4	NO	-0.141
255031	0.71	0.71	10.787	10.786	10.976	1	NO	0.557

Appendix E

Table E-7. 2009 MCAS: Delta Analyses—English Language Arts Grade 10

IREF	OLDP	NEWP	OLD DELTA	NEW DELTA	LINE	MAX	DISCARD	ST DEV FROM LINE
227156	0.77	0.79	10.04	9.77	10.03	1	NO	-1.10
227156	0.77	0.78	10.04	9.91	10.15	1	NO	-0.69
227157	0.60	0.62	11.99	11.78	11.91	1	NO	-0.82
227157	0.60	0.61	11.99	11.88	12.00	1	NO	-1.10
227158	0.81	0.82	9.49	9.34	9.62	1	NO	-0.61
227158	0.81	0.82	9.49	9.34	9.62	1	NO	-0.61
227159	0.78	0.78	9.91	9.91	10.15	1	NO	-0.11
227159	0.79	0.78	9.77	9.91	10.15	1	NO	0.50
227161	0.75	0.76	10.30	10.17	10.40	1	NO	-0.74
227161	0.76	0.75	10.17	10.30	10.52	1	NO	0.35
227163	0.55	0.55	12.50	12.50	12.58	1	NO	-0.81
227163	0.57	0.55	12.29	12.50	12.58	1	NO	0.08
227164	0.60	0.61	11.99	11.88	12.00	1	NO	-1.10
227164	0.60	0.60	11.99	11.99	12.10	1	NO	-0.67
227166	0.74	0.73	10.43	10.55	10.75	1	NO	0.26
227166	0.75	0.73	10.30	10.55	10.75	1	NO	0.80
227168	0.65	0.65	11.51	11.51	11.66	4	NO	-0.54
227168	0.64	0.66	11.62	11.35	11.50	4	NO	-0.67
227199	0.82	0.83	9.34	9.18	9.47	1	NO	-0.59
227199	0.83	0.85	9.18	8.85	9.16	1	NO	-1.09
227201	0.79	0.80	9.77	9.63	9.89	1	NO	-0.65
227201	0.81	0.79	9.49	9.77	10.03	1	NO	1.19
227202	0.78	0.77	9.91	10.04	10.28	1	NO	0.44
227202	0.77	0.78	10.04	9.91	10.15	1	NO	-0.69
227204	0.81	0.82	9.49	9.34	9.62	1	NO	-0.61
227204	0.82	0.84	9.34	9.02	9.32	1	NO	-1.10
227206	0.61	0.59	11.88	12.09	12.20	1	NO	0.21
227206	0.61	0.58	11.88	12.19	12.29	1	NO	0.63
227208	0.81	0.82	9.49	9.34	9.62	1	NO	-0.61
227208	0.83	0.83	9.18	9.18	9.47	1	NO	0.09
227209	0.65	0.66	11.46	11.35	11.50	1	NO	-0.98
227209	0.65	0.66	11.46	11.35	11.50	1	NO	-0.98
227211	0.79	0.78	9.77	9.91	10.15	1	NO	0.50
227211	0.78	0.78	9.91	9.91	10.15	1	NO	-0.11
227212	0.71	0.68	10.84	11.10	11.27	4	NO	0.70
227212	0.71	0.69	10.84	11.04	11.22	4	NO	0.46
228251	0.76	0.79	10.17	9.77	10.03	1	NO	-0.53
228251	0.75	0.80	10.30	9.63	9.89	1	NO	0.61
228253	0.58	0.57	12.19	12.29	12.39	1	NO	-0.31
228253	0.59	0.58	12.09	12.19	12.29	1	NO	-0.28
228266	0.55	0.58	12.55	12.19	12.29	4	NO	-0.06
228266	0.57	0.56	12.27	12.45	12.53	4	NO	-0.02
228316	0.73	0.76	10.55	10.17	10.40	1	NO	-0.53
228316	0.75	0.77	10.30	10.04	10.28	1	NO	-1.08
228320	0.64	0.62	11.57	11.78	11.91	1	NO	0.32
228320	0.63	0.62	11.67	11.78	11.91	1	NO	-0.15
228426	0.37	0.38	14.33	14.22	14.20	1	NO	-0.61
228426	0.35	0.36	14.54	14.43	14.40	1	NO	-0.54
228460	0.66	0.66	11.35	11.35	11.50	1	NO	-0.50
228460	0.66	0.67	11.35	11.24	11.40	1	NO	-0.95
228462	0.61	0.59	11.88	12.09	12.20	1	NO	0.21
228462	0.60	0.60	11.99	11.99	12.10	1	NO	-0.67

continued

Appendix E

IREF	OLDP	NEWP	OLD DELTA	NEW DELTA	LINE	MAX	DISCARD	ST DEV FROM LINE
228463	0.73	0.77	10.55	10.04	10.28	1	NO	0.00
228463	0.74	0.74	10.43	10.43	10.64	1	NO	-0.25
228464	0.74	0.75	10.43	10.30	10.52	1	NO	-0.76
228464	0.77	0.77	10.04	10.04	10.28	1	NO	-0.14
228465	0.72	0.70	10.67	10.90	11.08	1	NO	0.65
228465	0.72	0.69	10.67	11.02	11.19	1	NO	1.12
228466	0.78	0.78	9.91	9.91	10.15	1	NO	-0.11
228466	0.80	0.79	9.63	9.77	10.03	1	NO	0.55
228467	0.61	0.60	11.88	11.99	12.10	1	NO	-0.22
228467	0.61	0.62	11.88	11.78	11.91	1	NO	-1.08
228468	0.62	0.64	11.80	11.62	11.76	4	NO	-0.97
228468	0.59	0.64	12.09	11.54	11.68	4	NO	0.62
228480	0.82	0.85	9.34	8.85	9.16	1	NO	-0.41
228480	0.82	0.84	9.34	9.02	9.32	1	NO	-1.10
228482	0.79	0.77	9.77	10.04	10.28	1	NO	1.05
228482	0.80	0.77	9.63	10.04	10.28	1	NO	1.67
228483	0.82	0.85	9.34	8.85	9.16	1	NO	-0.41
228483	0.81	0.84	9.49	9.02	9.32	1	NO	-0.44
228484	0.77	0.81	10.04	9.49	9.76	1	NO	0.08
228484	0.79	0.80	9.77	9.63	9.89	1	NO	-0.65
228485	0.60	0.63	11.96	11.65	11.78	4	NO	-0.39
228485	0.59	0.63	12.06	11.67	11.81	4	NO	-0.05
253512	0.73	0.70	10.55	10.90	11.08	1	NO	1.18
253512	0.72	0.71	10.67	10.79	10.98	1	NO	0.17
253513	0.80	0.82	9.63	9.34	9.62	1	NO	-1.11
253513	0.81	0.81	9.49	9.49	9.76	1	NO	0.01
253814	0.67	0.66	11.24	11.35	11.50	1	NO	-0.02
253814	0.66	0.69	11.35	11.02	11.19	1	NO	-0.48
253816	0.85	0.88	8.85	8.30	8.64	1	NO	-0.25
253816	0.86	0.87	8.68	8.49	8.83	1	NO	-0.53
253817	0.60	0.62	12.04	11.80	11.93	4	NO	-0.70
253817	0.60	0.61	11.96	11.86	11.98	4	NO	-1.09
253903	0.76	0.77	10.17	10.04	10.28	1	NO	-0.71
253903	0.77	0.76	10.04	10.17	10.40	1	NO	0.39
253906	0.72	0.73	10.67	10.55	10.75	1	NO	-0.81
253906	0.72	0.74	10.67	10.43	10.64	1	NO	-1.04
253908	0.86	0.88	8.68	8.30	8.64	1	NO	-1.02
253908	0.86	0.87	8.68	8.49	8.83	1	NO	-0.53
253913	0.80	0.81	9.63	9.49	9.76	1	NO	-0.63
253913	0.82	0.80	9.34	9.63	9.89	1	NO	1.27
253924	0.83	0.79	9.18	9.77	10.03	1	NO	2.53
253924	0.82	0.80	9.34	9.63	9.89	1	NO	1.27
253926	0.60	0.68	11.99	11.13	11.30	1	NO	1.85
253926	0.60	0.65	11.99	11.46	11.61	1	NO	0.49
253934	0.67	0.67	11.24	11.24	11.40	1	NO	-0.47
253934	0.64	0.68	11.57	11.13	11.30	1	NO	0.01
253936	0.78	0.78	9.91	9.91	10.15	1	NO	-0.11
253936	0.78	0.77	9.91	10.04	10.28	1	NO	0.44
253938	0.59	0.59	12.12	12.06	12.17	4	NO	-0.92
253938	0.59	0.59	12.06	12.14	12.25	4	NO	-0.38
254165	0.67	0.70	11.24	10.90	11.08	1	NO	-0.49
254165	0.66	0.72	11.35	10.67	10.87	1	NO	0.95
254166	0.77	0.79	10.04	9.77	10.03	1	NO	-1.10

continued

Appendix E

IREF	OLDP	NEWP	OLD DELTA	NEW DELTA	LINE	MAX	DISCARD	ST DEV FROM LINE
254166	0.77	0.81	10.04	9.49	9.76	1	NO	0.08
254167	0.79	0.80	9.77	9.63	9.89	1	NO	-0.65
254167	0.79	0.80	9.77	9.63	9.89	1	NO	-0.65
254232	0.78	0.77	9.91	10.04	10.28	1	NO	0.44
254232	0.77	0.79	10.04	9.77	10.03	1	NO	-1.10
254237	0.65	0.64	11.43	11.62	11.76	4	NO	0.25
254237	0.63	0.66	11.67	11.35	11.50	4	NO	-0.44
255052	0.57	0.61	12.29	11.88	12.00	1	NO	0.10
255053	0.69	0.76	11.02	10.17	10.40	1	NO	1.52
255054	0.89	0.93	8.09	7.10	7.52	1	NO	1.37
255057	0.88	0.92	8.30	7.38	7.78	1	NO	1.11
255063	0.71	0.74	10.79	10.43	10.64	1	NO	-0.53
255068	0.83	0.84	9.18	9.02	9.32	1	NO	-0.57
255069	0.75	0.79	10.30	9.77	10.03	1	NO	0.03
255073	0.59	0.75	12.06	10.33	10.55	4	YES	5.48
257279	0.68	0.69	11.13	11.02	11.19	1	NO	-0.90
257282	0.71	0.74	10.79	10.43	10.64	1	NO	-0.53
257283	0.67	0.67	11.24	11.24	11.40	1	NO	-0.47
257284	0.66	0.71	11.35	10.79	10.98	1	NO	0.47
257286	0.80	0.79	9.63	9.77	10.03	1	NO	0.55
259276	0.84	0.90	9.02	7.87	8.24	1	NO	2.24
259280	0.84	0.91	9.02	7.64	8.02	1	YES	3.22
259314	0.83	0.89	9.18	8.09	8.45	1	NO	2.04
259319	0.60	0.68	11.99	11.13	11.30	1	NO	1.85
259323	0.81	0.84	9.49	9.02	9.32	1	NO	-0.44
259325	0.83	0.86	9.18	8.68	9.00	1	NO	-0.37
259326	0.69	0.74	11.02	10.43	10.64	1	NO	0.49
259328	0.54	0.67	12.65	11.27	11.43	4	YES	4.19
259752	0.79	0.85	9.77	8.85	9.16	1	NO	1.51
259753	0.83	0.84	9.18	9.02	9.32	1	NO	-0.57
259755	0.75	0.80	10.30	9.63	9.89	1	NO	0.61
259759	0.89	0.91	8.09	7.64	8.02	1	NO	-0.86
259761	0.86	0.88	8.68	8.30	8.64	1	NO	-1.02
259767	0.66	0.70	11.35	10.90	11.08	1	NO	-0.01
259769	0.70	0.76	10.90	10.17	10.40	1	NO	1.02
259770	0.79	0.79	9.77	9.77	10.03	1	NO	-0.07
259772	0.54	0.58	12.65	12.22	12.32	4	NO	0.27
266295	0.65	0.65	11.46	11.46	11.61	1	NO	-0.53
266299	0.84	0.87	9.02	8.49	8.83	1	NO	-0.32
266300	0.74	0.78	10.43	9.91	10.15	1	NO	0.02
266302	0.89	0.92	8.09	7.38	7.78	1	NO	0.20
266303	0.79	0.82	9.77	9.34	9.62	1	NO	-0.49
268600	0.89	0.91	8.09	7.64	8.02	1	NO	-0.86
268602	0.63	0.67	11.67	11.24	11.40	1	NO	0.01
268608	0.88	0.88	8.30	8.30	8.64	1	NO	0.33
268613	0.83	0.86	9.18	8.68	9.00	1	NO	-0.37
268615	0.57	0.64	12.29	11.62	11.76	4	NO	1.19

Mathematics

Table E-8. 2009 MCAS: Delta Analyses—Mathematics Grade 3

<i>IREF</i>	<i>OLDP</i>	<i>NEWP</i>	<i>OLD DELTA</i>	<i>NEW DELTA</i>	<i>LINE</i>	<i>MAX</i>	<i>DISCARD</i>	<i>ST DEV FROM LINE</i>
202948	0.81	0.82	9.488	9.339	9.440	1	NO	-0.761
202988	0.75	0.77	10.302	10.045	10.278	1	NO	-0.826
202996	0.51	0.67	12.900	11.240	11.698	1	NO	2.247
202999	0.78	0.80	9.911	9.634	9.790	1	NO	-0.572
203467	0.91	0.89	7.637	8.094	7.962	1	NO	-0.041
203477	0.80	0.78	9.634	9.911	10.120	1	NO	0.381
203539	0.65	0.72	11.459	10.669	11.019	1	NO	0.258
203598	1.38	1.43	11.017	10.728	11.090	2	NO	-0.698
203643	0.74	0.73	10.427	10.549	10.877	1	NO	0.287
203723	0.87	0.87	8.494	8.494	8.437	1	NO	-0.739
206959	0.81	0.82	9.488	9.339	9.440	1	NO	-0.761
206976	0.70	0.72	10.902	10.669	11.019	1	NO	-0.583
206988	0.86	0.88	8.679	8.300	8.206	1	NO	0.344
207010	0.45	0.42	13.503	13.808	14.747	1	NO	2.360
207019	0.85	0.85	8.854	8.854	8.865	1	NO	-0.861
207140	0.81	0.80	9.488	9.634	9.790	1	NO	-0.101
207673	0.35	0.56	14.541	12.396	13.071	1	NO	2.949
207704	0.85	0.86	8.854	8.679	8.656	1	NO	-0.371
207776	0.81	0.82	9.488	9.339	9.440	1	NO	-0.761
207799	0.85	0.85	8.854	8.854	8.865	1	NO	-0.861
207884	0.73	0.74	10.549	10.427	10.732	1	NO	-0.410
208002	1.59	1.60	9.704	9.634	9.790	2	NO	-0.665
218432	0.82	0.79	9.339	9.774	9.957	1	NO	0.726
218446	0.81	0.83	9.488	9.183	9.255	1	NO	-0.280
218469	0.84	0.85	9.022	8.854	8.865	1	NO	-0.477
218517	0.84	0.79	9.022	9.774	9.957	1	NO	1.552
218523	0.80	0.80	9.634	9.634	9.790	1	NO	-0.480
218564	0.71	0.73	10.787	10.549	10.877	1	NO	-0.652
218572	0.82	0.86	9.339	8.679	8.656	2	NO	0.893
218575	0.84	0.84	9.104	9.022	9.064	2	NO	-0.785
227103	0.68	0.66	11.129	11.350	11.829	1	NO	0.937
227229	0.89	0.88	8.094	8.300	8.206	1	NO	-0.595
227295	0.67	0.70	11.240	10.902	11.297	1	NO	-0.740
241026	1.41	1.48	10.845	10.427	10.732	2	NO	-0.594
260969	0.92	0.93	7.380	7.097	6.777	1	NO	0.683

Table E-9. 2009 MCAS: Delta Analyses—Mathematics Grade 4

<i>IREF</i>	<i>OLDP</i>	<i>NEWP</i>	<i>OLD DELTA</i>	<i>NEW DELTA</i>	<i>LINE</i>	<i>MAX</i>	<i>DISCARD</i>	<i>ST DEV FROM LINE</i>
218872	0.87	0.87	8.494	8.494	8.669	1	NO	-0.544
218876	0.93	0.93	7.097	7.097	7.333	1	NO	-0.128
218887	0.54	0.56	12.598	12.396	12.399	1	NO	-0.377
218909	0.78	0.80	9.911	9.634	9.758	1	NO	-0.689
218913	0.70	0.75	10.902	10.302	10.397	1	NO	1.690
218952	0.74	0.77	10.427	10.045	10.151	1	NO	0.138
219108	2.77	2.68	10.988	11.240	11.294	4	NO	0.343
221898	0.75	0.71	10.302	10.786	10.860	1	NO	2.047
221903	0.81	0.85	9.488	8.854	9.013	1	NO	1.487
221913	0.91	0.93	7.637	7.097	7.333	1	NO	0.329
221936	0.53	0.55	12.699	12.497	12.496	1	NO	-0.351
221957	0.57	0.56	12.295	12.396	12.399	1	NO	-1.018
221969	0.72	0.71	10.669	10.786	10.860	1	NO	-0.430
221974	0.84	0.88	9.022	8.300	8.483	1	NO	1.917
221984	0.81	0.80	9.488	9.634	9.758	1	NO	0.098
222051	0.55	0.54	12.497	12.598	12.592	1	NO	-1.083
222062	0.69	0.72	11.017	10.669	10.748	1	NO	0.094
222082	0.82	0.82	9.339	9.339	9.476	1	NO	-0.795
222093	0.92	0.92	7.380	7.380	7.604	1	NO	-0.212
222095	0.60	0.60	11.987	11.987	12.008	1	NO	-1.583
222099	0.58	0.57	12.192	12.295	12.302	1	NO	-0.985
222140	0.80	0.78	9.634	9.911	10.024	1	NO	0.911
222176	0.64	0.67	11.566	11.240	11.294	1	NO	0.114
226150	0.82	0.81	9.339	9.488	9.619	1	NO	0.173
227312	3.06	3.03	10.110	10.207	10.306	4	NO	-0.399
227323	2.50	2.40	11.725	11.987	12.008	4	NO	0.182
227452	0.64	0.62	11.566	11.778	11.808	1	NO	-0.089
227479	0.76	0.73	10.175	10.549	10.633	1	NO	1.372
227508	0.92	0.93	7.380	7.097	7.333	1	NO	-1.409
227518	0.74	0.76	10.427	10.175	10.276	1	NO	-0.703
227586	0.61	0.62	11.883	11.778	11.808	1	NO	-1.220
228713	0.78	0.77	9.911	10.045	10.151	1	NO	-0.104
228815	0.89	0.90	8.094	7.874	8.076	1	NO	-1.602
229002	0.86	0.85	8.679	8.854	9.013	1	NO	0.535
229007	0.69	0.74	11.017	10.396	10.487	4	NO	1.857
229043	0.80	0.82	9.634	9.339	9.476	1	NO	-0.660
250328	0.80	0.83	9.634	9.183	9.328	1	NO	0.342
250547	0.51	0.50	12.875	13.025	13.000	4	NO	-0.876
258192	0.68	0.73	11.129	10.549	10.633	1	NO	1.629

Table E-10. 2009 MCAS: Delta Analyses—Mathematics Grade 5

<i>IREF</i>	<i>OLDP</i>	<i>NEWP</i>	<i>OLD DELTA</i>	<i>NEW DELTA</i>	<i>LINE</i>	<i>MAX</i>	<i>DISCARD</i>	<i>ST DEV FROM LINE</i>
198670	0.69	0.68	11.017	11.129	11.403	1	NO	0.269
198672	0.63	0.64	11.673	11.566	11.864	1	NO	-0.317
198678	2.13	2.17	12.674	12.573	12.926	4	NO	-0.135
198686	2.48	2.53	11.778	11.646	11.948	4	NO	-0.381
198687	0.64	0.66	11.566	11.350	11.636	1	NO	-0.682
204664	0.56	0.59	12.396	12.090	12.416	1	NO	-0.832
204673	0.79	0.79	9.774	9.774	9.974	1	NO	-0.292
204680	0.83	0.87	9.183	8.494	8.624	1	NO	0.787
204708	0.84	0.85	9.022	8.854	9.004	1	NO	-0.836
204781	0.86	0.87	8.679	8.494	8.624	1	NO	-0.728
204785	0.86	0.83	8.679	9.183	9.351	1	NO	1.127
204826	0.80	0.81	9.634	9.488	9.673	1	NO	-0.774
204842	0.74	0.75	10.427	10.302	10.531	1	NO	-0.579
204843	0.69	0.71	11.017	10.787	11.041	1	NO	-0.817
204870	0.71	0.74	10.786	10.427	10.662	1	NO	-0.517
204886	0.64	0.65	11.566	11.459	11.750	1	NO	-0.338
204890	0.73	0.77	10.549	10.045	10.259	1	NO	-0.021
204915	0.85	0.86	8.854	8.679	8.819	1	NO	-0.784
206930	0.55	0.52	12.497	12.799	13.164	1	NO	1.111
206942	0.64	0.64	11.566	11.566	11.864	1	NO	0.002
207070	0.77	0.78	10.045	9.911	10.118	1	NO	-0.670
207144	0.72	0.76	10.669	10.175	10.396	1	NO	-0.074
207209	0.80	0.79	9.634	9.774	9.974	1	NO	0.131
207514	0.65	0.67	11.459	11.240	11.520	1	NO	-0.707
207646	0.34	0.54	14.650	12.598	12.952	1	YES	4.207
207648	0.56	0.56	12.396	12.396	12.739	1	NO	0.138
207742	2.23	2.34	12.421	12.141	12.470	4	NO	-0.745
217328	0.78	0.83	9.911	9.183	9.351	1	NO	0.792
221120	0.73	0.70	10.549	10.902	11.164	1	NO	0.955
221447	0.75	0.77	10.302	10.045	10.259	1	NO	-0.762
221523	0.74	0.73	10.427	10.549	10.791	1	NO	0.202
222156	0.71	0.81	10.786	9.488	9.673	1	NO	2.454
248857	0.78	0.82	9.911	9.339	9.514	1	NO	0.300
248882	1.32	1.45	14.760	14.407	14.860	4	NO	-0.591
249047	0.89	0.91	8.094	7.637	7.720	1	NO	0.231
249054	0.86	0.84	8.679	9.022	9.181	1	NO	0.616
261225	0.85	0.86	8.854	8.679	8.819	1	NO	-0.784
261234	2.03	2.25	12.925	12.371	12.712	4	NO	-0.253
261585	0.78	0.79	9.911	9.774	9.974	1	NO	-0.703

Table E-11. 2009 MCAS: Delta Analyses—Mathematics Grade 6

<i>IREF</i>	<i>OLDP</i>	<i>NEWP</i>	<i>OLD DELTA</i>	<i>NEW DELTA</i>	<i>LINE</i>	<i>MAX</i>	<i>DISCARD</i>	<i>ST DEV FROM LINE</i>
217507	0.61	0.66	11.88	11.35	11.57	1	NO	0.471
217532	0.77	0.78	10.04	9.91	10.12	1	NO	-0.726
222255	0.70	0.74	10.90	10.43	10.64	1	NO	0.204
223163	0.71	0.74	10.79	10.43	10.64	1	NO	-0.373
223421	2.15	2.14	13.23	13.00	13.22	4	NO	-1.085
226187	0.83	0.83	9.18	9.18	9.39	1	NO	-0.074
227430	0.72	0.75	10.67	10.30	10.51	1	NO	-0.337
227450	0.63	0.61	11.67	11.88	12.10	1	NO	1.018
227473	0.74	0.76	10.43	10.17	10.39	1	NO	-0.906
227497	0.75	0.82	10.30	9.34	9.55	1	NO	2.651
227529	0.80	0.84	9.63	9.02	9.23	1	NO	0.903
227709	0.86	0.84	8.68	9.02	9.23	1	NO	0.526
227715	0.51	0.53	12.90	12.70	12.92	1	NO	-0.807
227720	0.80	0.82	9.63	9.34	9.55	1	NO	1.633
227732	0.62	0.62	11.78	11.78	11.99	1	NO	-1.014
227737	0.64	0.65	11.57	11.46	11.67	1	NO	-0.677
227740	0.68	0.70	11.13	10.90	11.12	1	NO	-0.030
229036	0.86	0.87	8.68	8.49	8.70	1	NO	-0.570
229744	0.79	0.79	9.77	9.77	9.98	1	NO	-1.043
229754	2.12	2.15	12.17	12.01	12.23	4	NO	-1.003
229823	0.74	0.74	10.43	10.43	10.64	1	NO	-0.064
227535	0.70	0.69	10.90	11.02	11.23	1	NO	-0.794
227537	0.77	0.79	10.04	9.77	9.98	1	NO	-0.053
229832	0.87	0.84	8.49	9.02	9.23	1	NO	2.550
229856	0.75	0.81	10.30	9.49	9.70	1	NO	1.902
229881	0.71	0.74	10.79	10.43	10.64	1	NO	-0.373
229889	0.74	0.80	10.43	9.63	9.84	1	NO	1.798
229907	0.78	0.79	9.91	9.77	9.98	1	NO	-0.746
229915	0.84	0.86	9.02	8.68	8.88	1	NO	-0.425
229917	0.78	0.79	9.91	9.77	9.98	1	NO	-0.746
229924	0.76	0.78	10.17	9.91	10.12	1	NO	-0.843
229927	0.80	0.80	9.63	9.63	9.84	1	NO	-0.066
229928	3.08	3.06	10.14	10.30	10.51	4	NO	0.739
229936	2.78	2.71	10.73	10.84	11.06	4	NO	0.536
251345	0.79	0.82	9.77	9.34	9.55	1	NO	0.024
251387	0.74	0.76	10.43	10.17	10.39	1	NO	-0.906
251475	2.37	2.42	11.80	11.38	11.59	4	NO	-0.055
251575	0.63	0.64	11.67	11.57	11.78	1	NO	-0.563
265879	0.80	0.82	9.63	9.34	9.55	1	NO	-0.677

Table E-12. 2009 MCAS: Delta Analyses—Mathematics Grade 7

<i>IREF</i>	<i>OLDP</i>	<i>NEWP</i>	<i>OLD DELTA</i>	<i>NEW DELTA</i>	<i>LINE</i>	<i>MAX</i>	<i>DISCARD</i>	<i>ST DEV FROM LINE</i>
198325	0.82	0.83	9.339	9.183	9.468	1	NO	-0.500
198393	0.58	0.56	12.192	12.396	12.481	1	NO	0.233
205216	0.69	0.66	11.017	11.350	11.500	1	NO	1.132
205230	0.66	0.64	11.350	11.566	11.703	1	NO	0.528
205414	0.56	0.57	12.396	12.295	12.386	1	NO	-1.051
205451	0.70	0.69	10.902	11.017	11.187	1	NO	0.216
205464	0.59	0.60	12.090	11.987	12.097	1	NO	-1.065
205493	0.71	0.76	10.787	10.175	10.398	1	NO	0.693
205504	0.72	0.76	10.669	10.175	10.398	1	NO	0.150
205585	0.77	0.78	10.045	9.911	10.151	1	NO	-0.608
205587	0.74	0.83	10.427	9.183	9.468	1	YES	3.322
205589	0.75	0.80	10.302	9.634	9.890	1	NO	0.800
205689	2.55	2.62	11.593	11.405	11.551	4	NO	-0.08
208381	0.86	0.88	8.679	8.300	8.640	1	NO	-0.919
208400	0.53	0.50	12.699	13.000	13.047	1	NO	0.509
208417	0.74	0.76	10.427	10.175	10.398	1	NO	-0.966
208497	0.73	0.75	10.549	10.302	10.517	1	NO	-0.953
208505	0.85	0.86	8.854	8.679	8.995	1	NO	-0.449
208512	0.72	0.75	10.669	10.302	10.517	1	NO	-0.400
208544	0.79	0.81	9.774	9.488	9.754	1	NO	-1.006
208618	0.67	0.71	11.240	10.787	10.972	1	NO	0.141
208656	0.84	0.84	9.022	9.022	9.317	1	NO	0.262
208665	2.24	2.30	12.396	12.244	12.338	4	NO	-0.830
208698	2.63	2.74	11.377	11.073	11.240	4	NO	-0.467
208708	0.65	0.66	11.459	11.350	11.500	1	NO	-0.907
208772	0.77	0.79	10.045	9.774	10.022	1	NO	-0.996
219476	0.62	0.63	11.778	11.673	11.803	1	NO	-0.985
219530	0.69	0.73	11.017	10.549	10.749	1	NO	0.137
219538	0.48	0.50	13.201	13.000	13.047	1	NO	-0.392
235468	0.70	0.66	10.902	11.350	11.500	1	NO	1.659
239638	0.68	0.68	11.129	11.129	11.293	1	NO	-0.343
249128	0.57	0.56	12.295	12.396	12.481	1	NO	-0.238
249139	0.63	0.61	11.673	11.883	12.000	1	NO	0.410
249164	0.50	0.53	13.000	12.699	12.765	1	NO	-0.015
250243	0.82	0.87	9.339	8.494	8.822	1	NO	1.283
250384	1.61	1.87	13.988	13.326	13.353	4	NO	1.826
250450	2.65	2.65	11.323	11.323	11.475	4	NO	-0.398
250494	0.86	0.84	8.679	9.022	9.317	1	NO	1.846

Table E-13. 2009 MCAS: Delta Analyses—Mathematics Grade 8

<i>IREF</i>	<i>OLDP</i>	<i>NEWP</i>	<i>OLD DELTA</i>	<i>NEW DELTA</i>	<i>LINE</i>	<i>MAX</i>	<i>DISCARD</i>	<i>ST DEV FROM LINE</i>
219579	0.86	0.89	8.679	8.094	8.337	1	NO	0.496
219599	0.54	0.51	12.598	12.900	12.951	1	NO	0.541
219627	0.84	0.84	9.022	9.022	9.228	1	NO	-0.065
219639	0.34	0.39	14.650	14.117	14.121	1	NO	1.266
219709	0.70	0.81	10.902	9.488	9.676	1	YES	4.133
226923	0.70	0.71	10.902	10.787	10.922	1	NO	-0.830
226927	0.71	0.66	10.787	11.350	11.463	1	NO	1.872
226933	0.50	0.51	13.000	12.900	12.951	1	NO	-0.711
226984	0.73	0.74	10.549	10.427	10.577	1	NO	-0.797
227750	0.36	0.36	14.434	14.434	14.425	1	NO	-0.872
227753	0.51	0.52	12.900	12.799	12.855	1	NO	-0.727
227803	0.84	0.84	9.022	9.022	9.228	1	NO	-0.065
227807	0.57	0.57	12.295	12.295	12.370	1	NO	-0.600
227811	0.42	0.41	13.808	13.910	13.922	1	NO	-0.442
227812	0.37	0.36	14.327	14.434	14.424	1	NO	-0.512
227814	0.74	0.73	10.427	10.549	10.694	1	NO	0.188
227819	0.68	0.67	11.129	11.240	11.358	1	NO	0.030
227820	0.36	0.33	14.434	14.760	14.737	1	NO	0.337
227825	0.58	0.56	12.192	12.396	12.468	1	NO	0.221
227830	0.67	0.67	11.240	11.240	11.358	1	NO	-0.427
227832	0.61	0.62	11.883	11.778	11.874	1	NO	-0.876
227834	0.68	0.67	11.129	11.240	11.358	1	NO	0.030
228127	0.80	0.82	9.634	9.339	9.532	1	NO	-0.492
228132	3.03	3.11	10.207	9.945	10.114	4	NO	-0.529
228534	0.60	0.61	11.987	11.883	11.975	1	NO	-0.862
228775	0.54	0.56	12.598	12.396	12.468	1	NO	-0.374
229523	0.56	0.57	12.396	12.295	12.370	1	NO	-0.804
229596	0.51	0.55	12.900	12.497	12.565	1	NO	0.465
243892	0.53	0.49	12.699	13.100	13.144	1	NO	0.919
252994	0.53	0.49	12.699	13.100	13.144	1	NO	0.919
253700	0.72	0.73	10.669	10.549	10.694	1	NO	-0.807
253758	0.78	0.79	9.911	9.774	9.950	1	NO	-0.751
253768	2.14	2.11	12.649	12.724	12.783	4	NO	-0.360
253811	1.61	1.73	13.988	13.680	13.701	4	NO	0.269
253813	2.43	2.50	11.909	11.725	11.824	4	NO	-0.561
253847	0.48	0.55	13.201	12.497	12.565	1	NO	1.702
253890	0.42	0.46	13.808	13.402	13.433	1	NO	0.628
265581	1.93	1.96	13.176	13.100	13.144	4	NO	-0.781
265928	0.76	0.77	10.175	10.045	10.210	1	NO	-0.767

Table E-14. 2009 MCAS: Delta Analyses—Mathematics Grade 10

IREF	OLDP	NEWP	OLD DELTA	NEW DELTA	LINE	MAX	DISCARD	ST DEV FROM LINE
227869	0.60	0.61	11.99	11.88	11.96	1	NO	-1.05
227869	0.62	0.60	11.78	11.99	12.06	1	NO	-0.08
227879	0.46	0.49	13.40	13.10	13.13	1	NO	-0.12
227879	0.49	0.47	13.10	13.30	13.32	1	NO	-0.33
227880	0.43	0.43	13.71	13.71	13.70	1	NO	-1.14
227880	0.42	0.41	13.81	13.91	13.90	1	NO	-0.80
227888	0.53	0.50	12.70	13.00	13.03	1	NO	0.09
227888	0.55	0.53	12.50	12.70	12.74	1	NO	-0.23
227936	0.58	0.63	12.19	11.67	11.76	1	NO	0.46
227936	0.57	0.57	12.29	12.29	12.36	1	NO	-0.91
227950	0.55	0.51	12.50	12.90	12.93	1	NO	0.49
227950	0.53	0.53	12.70	12.70	12.74	1	NO	-0.98
227955	0.38	0.36	14.22	14.43	14.40	1	NO	-0.48
227955	0.39	0.39	14.12	14.12	14.10	1	NO	-1.07
228023	0.58	0.51	12.19	12.90	12.93	1	NO	1.62
228023	0.56	0.49	12.40	13.10	13.13	1	NO	1.58
229533	0.45	0.52	13.50	12.80	12.84	1	NO	1.33
229533	0.46	0.48	13.40	13.20	13.22	1	NO	-0.47
229564	0.44	0.44	13.65	13.58	13.58	4	NO	-0.88
229564	0.43	0.42	13.76	13.81	13.80	4	NO	-0.97
229625	0.50	0.52	13.00	12.80	12.84	1	NO	-0.54
229625	0.49	0.54	13.10	12.60	12.65	1	NO	0.55
229645	0.55	0.54	12.47	12.57	12.62	4	NO	-0.58
229645	0.57	0.54	12.29	12.60	12.65	4	NO	0.17
229676	0.50	0.44	13.00	13.60	13.61	1	NO	1.12
229676	0.47	0.45	13.30	13.50	13.51	1	NO	-0.36
229776	0.67	0.68	11.24	11.13	11.24	1	NO	-1.13
229776	0.67	0.71	11.24	10.79	10.92	1	NO	0.07
229932	0.51	0.59	12.90	12.09	12.16	1	NO	1.61
229932	0.51	0.58	12.90	12.19	12.26	1	NO	1.24
229964	0.62	0.64	11.78	11.57	11.66	1	NO	-0.70
229964	0.62	0.61	11.78	11.88	11.96	1	NO	-0.45
230072	0.39	0.39	14.12	14.12	14.10	1	NO	-1.07
230072	0.41	0.41	13.91	13.91	13.90	1	NO	-1.11
250670	0.49	0.45	13.10	13.50	13.51	1	NO	0.39
250670	0.48	0.46	13.20	13.40	13.41	1	NO	-0.34
250676	0.44	0.44	13.60	13.60	13.61	1	NO	-1.13
250889	0.72	0.75	10.67	10.30	10.45	1	NO	-0.34
250900	0.71	0.70	10.79	10.90	11.03	1	NO	-0.25
250921	0.61	0.65	11.88	11.46	11.56	1	NO	0.07
250946	0.40	0.41	14.01	13.91	13.90	1	NO	-0.72
250946	0.41	0.39	13.91	14.12	14.10	1	NO	-0.44
251666	0.47	0.47	13.33	13.33	13.34	4	NO	-1.08
251666	0.44	0.49	13.58	13.13	13.15	4	NO	0.45
253140	0.84	0.82	9.02	9.34	9.53	1	NO	0.76
253190	0.60	0.68	11.99	11.13	11.24	1	NO	1.63
253190	0.60	0.68	11.99	11.13	11.24	1	NO	1.63
253721	0.53	0.51	12.70	12.90	12.93	1	NO	-0.26
253721	0.53	0.53	12.70	12.70	12.74	1	NO	-0.98
253905	0.58	0.60	12.19	11.99	12.06	1	NO	-0.66
254106	0.61	0.60	11.88	11.99	12.06	1	NO	-0.47
254127	0.61	0.59	11.88	12.09	12.16	1	NO	-0.11

continued

Appendix E

IREF	OLDP	NEWP	OLD DELTA	NEW DELTA	LINE	MAX	DISCARD	ST DEV FROM LINE
254137	0.74	0.73	10.43	10.55	10.69	1	NO	-0.17
254149	0.74	0.79	10.46	9.74	9.92	4	NO	0.88
254149	0.74	0.80	10.46	9.70	9.88	4	NO	1.00
254300	0.82	0.81	9.34	9.49	9.68	1	NO	0.11
254550	0.56	0.64	12.40	11.57	11.66	1	NO	1.60
254550	0.58	0.62	12.19	11.78	11.86	1	NO	0.08
254553	0.42	0.45	13.81	13.50	13.51	4	NO	-0.04
254553	0.43	0.46	13.73	13.43	13.44	4	NO	-0.05
254557	0.60	0.63	11.99	11.67	11.76	1	NO	-0.31
254662	0.40	0.37	14.01	14.33	14.30	1	NO	-0.08
254662	0.38	0.39	14.22	14.12	14.10	1	NO	-0.68
254671	0.48	0.53	13.20	12.70	12.74	1	NO	0.56
254671	0.50	0.53	13.00	12.70	12.74	1	NO	-0.19
254820	0.48	0.50	13.20	13.00	13.03	1	NO	-0.51
254820	0.49	0.52	13.10	12.80	12.84	1	NO	-0.17
254846	0.59	0.63	12.09	11.67	11.76	1	NO	0.08
254846	0.57	0.62	12.29	11.78	11.86	1	NO	0.46
257922	0.49	0.46	13.10	13.40	13.41	1	NO	0.03
257922	0.50	0.50	13.00	13.00	13.03	1	NO	-1.03
258396	0.62	0.62	11.78	11.78	11.86	1	NO	-0.82
258397	0.69	0.74	11.02	10.43	10.57	1	NO	0.51
258452	0.62	0.64	11.78	11.57	11.66	1	NO	-0.70
258452	0.62	0.62	11.78	11.78	11.86	1	NO	-0.82
258457	0.59	0.66	12.09	11.35	11.45	1	NO	1.22
258457	0.59	0.65	12.09	11.46	11.56	1	NO	0.84
258462	0.47	0.45	13.30	13.50	13.51	1	NO	-0.36
271548	0.42	0.45	13.81	13.50	13.51	1	NO	-0.04
272635	0.70	0.72	10.93	10.67	10.80	4	NO	-0.66
272829	0.53	0.54	12.70	12.60	12.65	1	NO	-0.95
269051	0.59	0.54	12.09	12.60	12.65	1	NO	0.93
269060	0.70	0.67	10.90	11.24	11.35	1	NO	0.52
258797	0.58	0.58	12.19	12.19	12.26	1	NO	-0.89
258799	0.69	0.74	11.02	10.43	10.57	1	NO	0.51
258806	0.61	0.57	11.88	12.29	12.36	1	NO	0.62
258807	0.70	0.68	10.90	11.13	11.24	1	NO	0.13
258807	0.70	0.67	10.90	11.24	11.35	1	NO	0.52
258814	0.61	0.59	11.88	12.09	12.16	1	NO	-0.11
258814	0.61	0.62	11.88	11.78	11.86	1	NO	-1.07
260263	0.51	0.55	12.90	12.50	12.55	1	NO	0.16
260265	0.79	0.82	9.77	9.34	9.53	1	NO	-0.24
260863	0.54	0.54	12.60	12.60	12.65	1	NO	-0.96
260865	0.52	0.54	12.80	12.60	12.65	1	NO	-0.57
260877	0.53	0.54	12.70	12.60	12.65	1	NO	-0.95
260878	0.47	0.56	13.30	12.40	12.45	1	NO	2.01
260881	0.58	0.46	12.19	13.40	13.41	1	YES	3.41
260901	0.51	0.52	12.92	12.80	12.84	4	NO	-0.82
261445	0.48	0.54	13.20	12.60	12.65	1	NO	0.92
261479	0.42	0.46	13.81	13.40	13.41	1	NO	0.32
261479	0.44	0.48	13.60	13.20	13.22	1	NO	0.28
261545	0.61	0.61	11.93	11.88	11.96	4	NO	-1.04
261736	0.44	0.42	13.60	13.81	13.80	1	NO	-0.40
261736	0.44	0.45	13.60	13.50	13.51	1	NO	-0.80
261737	0.55	0.39	12.50	14.12	14.10	1	YES	4.82

continued

Appendix E

IREF	OLDP	NEWP	OLD DELTA	NEW DELTA	LINE	MAX	DISCARD	ST DEV FROM LINE
261737	0.52	0.39	12.80	14.12	14.10	1	YES	3.69
268057	0.59	0.59	12.09	12.09	12.16	1	NO	-0.88
268098	0.53	0.53	12.70	12.70	12.74	1	NO	-0.98
268298	0.70	0.73	10.90	10.55	10.69	1	NO	-0.34
268298	0.70	0.73	10.90	10.55	10.69	1	NO	-0.34
268306	0.55	0.57	12.50	12.29	12.36	1	NO	-0.62
268306	0.55	0.57	12.50	12.29	12.36	1	NO	-0.62
268428	0.77	0.78	10.04	9.91	10.08	1	NO	-1.01
268432	0.61	0.62	11.86	11.75	11.84	4	NO	-1.07
268496	0.87	0.86	8.49	8.68	8.90	1	NO	0.37
268496	0.87	0.86	8.49	8.68	8.90	1	NO	0.37
268498	0.59	0.63	12.09	11.67	11.76	1	NO	0.08
268509	0.54	0.55	12.60	12.50	12.55	4	NO	-0.96
268509	0.53	0.55	12.70	12.50	12.55	4	NO	-0.59
268662	0.61	0.56	11.88	12.40	12.45	1	NO	0.98
268680	0.69	0.67	11.02	11.24	11.35	4	NO	0.10
269006	0.84	0.82	9.02	9.34	9.53	1	NO	0.76

Science and Technology/Engineering

Table E-15. 2009 MCAS: Delta Analyses—Science and Technology/Engineering Grade 5

<i>IREF</i>	<i>OLDP</i>	<i>NEWP</i>	<i>OLD DELTA</i>	<i>NEW DELTA</i>	<i>LINE</i>	<i>MAX</i>	<i>DISCARD</i>	<i>ST DEV FROM LINE</i>
227356	0.49	0.53	13.100	12.699	12.796	1	NO	0.698
227841	0.85	0.85	8.854	8.854	8.958	1	NO	-0.662
227856	0.64	0.65	11.566	11.459	11.558	1	NO	-1.309
228993	0.59	0.58	12.090	12.192	12.290	1	NO	-0.005
229060	1.85	1.98	13.377	13.050	13.147	4	NO	0.194
229126	0.73	0.75	10.549	10.302	10.403	1	NO	-0.378
229139	0.50	0.51	13.000	12.900	12.997	1	NO	-1.341
229266	0.75	0.78	10.302	9.911	10.013	1	NO	0.595
229272	2.17	2.22	12.573	12.447	12.544	4	NO	-1.170
229322	0.81	0.79	9.488	9.774	9.876	1	NO	1.265
245091	2.07	2.20	12.824	12.497	12.595	4	NO	0.192
245343	0.87	0.88	8.494	8.300	8.405	1	NO	-0.755
245362	0.79	0.81	9.774	9.488	9.591	1	NO	-0.121
245372	0.79	0.80	9.774	9.634	9.736	1	NO	-1.103
245463	0.92	0.93	7.380	7.097	7.203	1	NO	-0.169
245485	0.75	0.78	10.302	9.911	10.013	1	NO	0.594
245494	0.87	0.86	8.494	8.679	8.783	1	NO	0.589
245524	0.79	0.81	9.774	9.488	9.591	1	NO	-0.121
245538	0.80	0.79	9.634	9.774	9.876	1	NO	0.282
245539	0.68	0.70	11.129	10.902	11.003	1	NO	-0.506
253115	0.81	0.79	9.488	9.774	9.876	1	NO	1.265
253150	0.78	0.78	9.911	9.911	10.013	1	NO	-0.674
264834	0.62	0.68	11.778	11.129	11.229	1	NO	2.358
264835	0.70	0.74	10.902	10.427	10.528	1	NO	1.176
264838	0.79	0.81	9.774	9.488	9.591	1	NO	-0.121
264845	1.63	1.49	13.936	14.301	14.395	4	NO	1.750
264847	0.88	0.89	8.300	8.094	8.199	1	NO	-0.678
264856	0.70	0.69	10.902	11.017	11.117	1	NO	0.087
264868	0.79	0.80	9.774	9.634	9.736	1	NO	-1.103
264881	0.65	0.66	11.459	11.350	11.450	1	NO	-1.302
264882	0.87	0.85	8.494	8.854	8.958	1	NO	1.777
264887	0.65	0.61	11.459	11.883	11.981	1	NO	2.177
273693	0.89	0.90	8.094	7.874	7.979	1	NO	-0.586
273717	0.61	0.63	11.883	11.673	11.771	1	NO	-0.610
273749	0.66	0.67	11.350	11.240	11.340	1	NO	-1.295
273757	0.86	0.86	8.679	8.679	8.783	1	NO	-0.660
273760	0.55	0.53	12.497	12.699	12.796	1	NO	0.660
273773	2.45	2.43	11.857	11.909	12.007	4	NO	-0.344
273780	0.57	0.59	12.295	12.090	12.188	1	NO	-0.642

Table E-16. 2009 MCAS: Delta Analyses—Science and Technology/Engineering Grade 8

<i>IREF</i>	<i>OLDP</i>	<i>NEWP</i>	<i>OLD DELTA</i>	<i>NEW DELTA</i>	<i>LINE</i>	<i>MAX</i>	<i>DISCARD</i>	<i>ST DEV FROM LINE</i>
227910	0.77	0.80	10.045	9.634	9.693	1	NO	0.479
227971	0.70	0.69	10.902	11.017	11.128	1	NO	-0.022
229335	0.69	0.72	11.017	10.669	10.767	1	NO	0.076
229349	0.72	0.74	10.669	10.427	10.515	1	NO	-0.307
229371	0.69	0.70	11.017	10.902	11.009	1	NO	-0.882
229382	0.75	0.75	10.302	10.302	10.386	1	NO	-0.580
229393	0.27	0.29	15.451	15.214	15.482	1	NO	-0.791
229394	0.57	0.59	12.295	12.090	12.241	1	NO	-0.701
229401	0.80	0.82	9.634	9.339	9.387	1	NO	0.064
229404	0.56	0.55	12.396	12.497	12.664	1	NO	0.146
229421	0.87	0.86	8.494	8.679	8.702	1	NO	-0.092
229437	0.68	0.68	11.129	11.129	11.244	1	NO	-0.457
229451	0.71	0.72	10.787	10.669	10.767	1	NO	-0.833
229454	0.83	0.82	9.183	9.339	9.387	1	NO	-0.109
229455	2.36	2.37	12.090	12.064	12.214	4	NO	-0.420
229478	1.98	1.95	13.050	13.125	13.315	4	NO	0.136
246325	2.10	2.15	12.749	12.623	12.795	4	NO	-0.732
246330	0.46	0.49	13.402	13.100	13.289	1	NO	-0.468
246368	0.50	0.52	13.000	12.799	12.977	1	NO	-0.822
246378	0.85	0.81	8.854	9.488	9.542	1	NO	1.806
252744	0.58	0.58	12.192	12.192	12.347	1	NO	-0.299
265216	0.70	0.72	10.902	10.669	10.767	1	NO	-0.375
265242	0.79	0.80	9.774	9.634	9.693	1	NO	-0.589
265247	0.47	0.49	13.301	13.100	13.289	1	NO	-0.866
265248	0.60	0.60	11.987	11.987	12.134	1	NO	-0.330
265251	0.70	0.70	10.902	10.902	11.009	1	NO	-0.491
265258	1.97	2.18	13.075	12.548	12.716	4	NO	0.507
265260	0.89	0.88	8.094	8.300	8.309	1	NO	-0.062
265273	0.65	0.60	11.459	11.987	12.134	1	NO	1.756
265279	0.43	0.57	13.706	12.295	12.453	1	YES	4.036
265280	0.32	0.33	14.871	14.760	15.011	1	NO	-0.358
265283	0.69	0.71	11.017	10.786	10.889	1	NO	-0.407
265290	2.29	2.35	12.269	12.116	12.268	4	NO	-0.907
265292	0.61	0.58	11.883	12.192	12.348	1	NO	0.924
265305	0.70	0.70	10.902	10.902	11.009	1	NO	-0.491
273955	0.81	0.85	9.488	8.854	8.884	1	NO	1.476
273956	0.50	0.52	13.000	12.799	12.977	1	NO	-0.822
273978	0.67	0.66	11.240	11.350	11.474	1	NO	0.010
274002	0.78	0.83	9.911	9.183	9.226	1	NO	1.797

Table E-17. 2009 MCAS: Delta Analyses—High School Biology Grades 9–11

IREF	OLDP	NEWP	OLD DELTA	NEW DELTA	LINE	MAX	DISCARD	ST DEV FROM LINE
208042	0.64	0.65	11.57	11.46	11.77	1	NO	-0.55
208113	0.67	0.78	11.24	9.91	10.34	1	NO	1.99
208134	0.47	0.55	13.30	12.50	12.74	1	NO	0.73
208214	0.41	0.37	13.91	14.33	14.44	1	NO	0.63
209032	0.43	0.46	13.71	13.40	13.58	1	NO	-0.86
209033	0.48	0.55	13.20	12.50	12.74	1	NO	0.37
209050	0.84	0.83	9.02	9.18	9.66	1	NO	1.01
213734	0.61	0.67	11.88	11.24	11.57	1	NO	-0.18
219815	0.69	0.80	11.02	9.63	10.08	1	NO	2.11
219822	0.50	0.52	13.00	12.80	13.02	1	NO	-1.23
219826	0.54	0.54	12.60	12.60	12.83	1	NO	-0.45
219827	0.67	0.75	11.24	10.30	10.70	1	NO	0.66
219830	0.35	0.42	14.54	13.86	14.01	4	NO	0.64
229477	0.45	0.47	13.50	13.30	13.49	1	NO	-1.26
234751	0.73	0.72	10.55	10.67	11.04	1	NO	0.48
234802	0.83	0.83	9.18	9.18	9.66	1	NO	0.42
234833	0.64	0.57	11.57	12.29	12.55	1	NO	2.29
235175	0.67	0.68	11.24	11.13	11.47	1	NO	-0.48
241739	0.25	0.23	15.67	15.96	15.96	4	NO	-0.25
243372	0.67	0.74	11.24	10.43	10.82	1	NO	0.24
243376	0.58	0.68	12.19	11.13	11.47	1	NO	1.33
244288	0.54	0.56	12.60	12.40	12.65	1	NO	-1.13
248893	0.48	0.51	13.20	12.90	13.12	1	NO	-1.00
248970	0.36	0.34	14.46	14.70	14.79	4	NO	-0.10
256923	0.57	0.60	12.29	11.99	12.27	1	NO	-1.21
256965	0.50	0.50	13.00	13.00	13.21	4	NO	-0.55
260949	0.57	0.51	12.29	12.90	13.12	1	NO	1.68
260993	0.67	0.73	11.24	10.55	10.93	1	NO	-0.17
260998	0.66	0.66	11.35	11.35	11.67	1	NO	-0.13
261008	0.38	0.42	14.22	13.81	13.96	1	NO	-0.35
261009	0.41	0.52	13.91	12.80	13.02	1	NO	1.93
261015	0.64	0.61	11.57	11.88	12.17	1	NO	0.89
261019	0.62	0.60	11.78	11.99	12.27	1	NO	0.47
261181	0.74	0.77	10.43	10.04	10.46	1	NO	-1.19
261241	0.63	0.68	11.70	11.18	11.52	4	NO	-0.66
261335	0.57	0.59	12.29	12.09	12.36	1	NO	-1.07
261414	0.54	0.56	12.60	12.40	12.65	1	NO	-1.13
266316	0.62	0.67	11.78	11.24	11.57	1	NO	-0.56
266423	0.79	0.81	9.77	9.49	9.94	1	NO	-0.70
268446	0.55	0.56	12.50	12.40	12.65	1	NO	-0.77
268449	0.66	0.67	11.35	11.24	11.57	1	NO	-0.50
271710	0.54	0.55	12.60	12.50	12.74	1	NO	-0.79
271716	0.74	0.77	10.43	10.04	10.46	1	NO	-1.19
273807	0.72	0.80	10.67	9.63	10.08	1	NO	0.84
273815	0.77	0.78	10.04	9.91	10.34	1	NO	-0.25

Table E-18. 2009 MCAS: Delta Analyses—High School Chemistry Grades 9–11

IREF	OLDP	NEW P	OLD DELTA	NEW DELTA	LINE	MAX	DISCARD	ST DEV FROM LINE
206662	0.65	0.67	11.46	11.24	10.67	1	NO	1.71
206688	0.28	0.26	15.30	15.57	15.48	4	NO	-0.67
208259	0.81	0.76	9.49	10.17	9.49	1	NO	-1.37
208270	0.53	0.45	12.70	13.50	13.18	1	NO	0.52
216945	0.57	0.56	12.29	12.40	11.96	1	NO	-0.05
226985	0.48	0.39	13.20	14.12	13.87	1	NO	1.23
226999	0.74	0.70	10.43	10.90	10.30	1	NO	-0.87
229235	0.59	0.55	12.09	12.50	12.07	1	NO	-1.29
229331	0.44	0.36	13.60	14.43	14.22	1	NO	1.03
229548	0.55	0.57	12.50	12.29	11.84	1	NO	1.19
229587	0.40	0.37	14.01	14.33	14.10	1	NO	-1.04
229666	0.52	0.43	12.80	13.71	13.41	1	NO	1.01
244829	0.43	0.39	13.71	14.12	13.87	1	NO	-0.75
244849	0.38	0.41	14.22	13.91	13.64	1	NO	0.92
244939	0.37	0.40	14.33	14.01	13.75	1	NO	0.88
244944	0.26	0.27	15.64	15.48	15.38	4	NO	-0.38
246821	0.33	0.29	14.76	15.21	15.08	1	NO	-0.11
246822	0.30	0.34	15.10	14.65	14.46	1	NO	1.13
246824	0.56	0.53	12.40	12.70	12.29	1	NO	-0.97
246825	0.32	0.30	14.87	15.10	14.95	1	NO	-1.05
251803	0.65	0.53	11.46	12.70	12.29	1	NO	1.89
252645	0.33	0.32	14.76	14.87	14.70	1	NO	-1.15
252658	0.57	0.51	12.29	12.90	12.51	1	NO	-0.52
252670	0.34	0.34	14.65	14.65	14.46	1	NO	-0.62
252675	0.72	0.66	10.67	11.35	10.79	1	NO	-0.89
252678	0.74	0.65	10.43	11.46	10.91	1	NO	0.54
258915	0.58	0.56	12.19	12.40	11.96	1	NO	-0.45
258922	0.36	0.34	14.49	14.65	14.46	4	NO	-1.26
258932	0.50	0.51	13.00	12.90	12.51	1	NO	0.53
258935	0.41	0.43	13.91	13.71	13.41	1	NO	0.59
258938	0.57	0.49	12.29	13.10	12.74	1	NO	0.36
258941	0.40	0.35	14.01	14.54	14.34	1	NO	-0.11
260036	0.48	0.46	13.20	13.40	13.07	1	NO	-0.87
260745	0.37	0.39	14.33	14.12	13.87	1	NO	0.43
260766	0.59	0.59	12.09	12.09	11.62	1	NO	0.48
261087	0.43	0.40	13.71	14.01	13.75	1	NO	-1.20
261661	0.55	0.43	12.47	13.71	13.41	4	NO	2.30
264310	0.73	0.68	10.55	11.13	10.55	1	NO	-1.38
264314	0.40	0.40	14.01	14.01	13.75	1	NO	-0.35
264341	0.45	0.44	13.50	13.60	13.30	1	NO	-0.57
271911	0.52	0.43	12.80	13.71	13.41	1	NO	1.01
274045	0.48	0.44	13.18	13.63	13.32	4	NO	-0.79
274049	0.43	0.39	13.71	14.12	13.87	1	NO	-0.75
274061	0.55	0.58	12.50	12.19	11.73	1	NO	1.64
274078	0.54	0.47	12.60	13.30	12.96	1	NO	0.04

Table E-19. 2009 MCAS: Delta Analyses—High School Introductory Physics Grades 9–11

IREF	OLDP	NEWP	OLD DELTA	NEW DELTA	LINE	MAX	DISCARD	ST DEV FROM LINE
208338	0.51	0.47	12.90	13.30	13.38	1	NO	0.57
208475	0.57	0.59	12.29	12.09	12.22	1	NO	-0.73
208489	0.63	0.67	11.67	11.24	11.41	1	NO	-0.12
208495	0.72	0.70	10.67	10.90	11.09	1	NO	0.36
210933	0.60	0.58	11.99	12.19	12.32	1	NO	0.10
211087	0.74	0.80	10.43	9.63	9.87	1	NO	0.80
211100	0.85	0.82	8.85	9.34	9.59	1	NO	1.37
226225	0.62	0.81	11.78	9.49	9.73	1	YES	5.54
226774	0.83	0.86	9.18	8.68	8.96	1	NO	-0.24
235237	0.64	0.62	11.57	11.78	11.92	1	NO	0.17
235254	0.75	0.76	10.30	10.17	10.39	1	NO	-0.68
235257	0.65	0.63	11.46	11.67	11.82	1	NO	0.19
235327	0.62	0.61	11.78	11.88	12.02	1	NO	-0.18
235384	0.61	0.65	11.88	11.46	11.62	1	NO	-0.12
246573	0.51	0.55	12.90	12.50	12.61	1	NO	-0.05
246879	0.54	0.57	12.60	12.29	12.42	1	NO	-0.39
246946	0.46	0.44	13.40	13.60	13.67	1	NO	-0.11
246950	0.55	0.59	12.50	12.09	12.22	1	NO	-0.09
246997	0.68	0.71	11.13	10.79	10.97	1	NO	-0.47
251772	0.77	0.78	10.04	9.91	10.14	1	NO	-0.67
258346	0.68	0.71	11.13	10.79	10.97	1	NO	-0.47
258348	0.56	0.52	12.40	12.80	12.90	1	NO	0.64
258367	0.45	0.51	13.50	12.90	13.00	1	NO	0.64
261103	0.31	0.34	14.98	14.65	14.67	1	NO	0.03
261105	0.62	0.59	11.78	12.09	12.22	1	NO	0.45
261108	0.46	0.51	13.40	12.90	13.00	1	NO	0.32
261110	0.50	0.51	13.00	12.90	13.00	1	NO	-0.95
261119	0.49	0.50	13.10	13.00	13.09	1	NO	-0.94
261144	0.55	0.53	12.47	12.67	12.78	4	NO	0.02
261149	0.49	0.44	13.15	13.63	13.70	4	NO	0.77
261151	0.37	0.40	14.33	14.01	14.06	1	NO	-0.12
261235	0.74	0.74	10.43	10.43	10.63	1	NO	-0.31
261272	0.44	0.44	13.60	13.60	13.67	1	NO	-0.75
261282	0.47	0.46	13.33	13.43	13.50	4	NO	-0.40
261283	0.40	0.40	13.99	13.99	14.04	4	NO	-0.80
261497	0.66	0.67	11.35	11.24	11.41	1	NO	-0.77
261500	0.43	0.44	13.76	13.60	13.67	4	NO	-0.69
261513	0.34	0.39	14.65	14.12	14.16	1	NO	0.59
266472	0.70	0.71	10.90	10.79	10.97	1	NO	-0.73
266480	0.81	0.82	9.49	9.34	9.59	1	NO	-0.64
266487	0.61	0.62	11.88	11.78	11.92	1	NO	-0.83
266491	0.49	0.47	13.10	13.30	13.38	1	NO	-0.07
266493	0.65	0.69	11.46	11.02	11.19	1	NO	-0.12
266502	0.58	0.56	12.19	12.40	12.52	1	NO	0.06
273125	0.63	0.62	11.67	11.78	11.92	1	NO	-0.16

Table E-20. 2009 MCAS: Delta Analyses—High School Technology/Engineering Grades 9–11

IREF	OLDP	NEWP	OLD DELTA	NEW DELTA	LINE	MAX	DISCARD	ST DEV FROM LINE
271590	0.47	0.44	13.30	13.60	14.09	1	NO	0.34
273173	0.51	0.50	12.90	13.00	13.40	1	NO	-0.23
274276	0.81	0.83	9.49	9.18	9.05	1	NO	-0.36
274330	0.61	0.62	11.88	11.78	12.01	1	NO	-0.98
274351	0.69	0.68	11.02	11.13	11.27	1	NO	-0.73
206609	0.82	0.79	9.34	9.77	9.72	1	NO	-0.47
206779	0.45	0.56	13.50	12.40	12.72	1	NO	0.33
206792	0.30	0.38	15.13	14.20	14.77	4	NO	-0.52
208100	0.35	0.50	14.54	13.00	13.40	1	NO	1.02
208123	0.37	0.44	14.33	13.60	14.09	1	NO	-0.77
208981	0.57	0.49	12.29	13.10	13.52	1	NO	1.19
215946	0.86	0.82	8.68	9.34	9.23	1	NO	-0.15
221588	0.32	0.58	14.87	12.19	12.48	1	YES	3.50
221714	0.56	0.57	12.40	12.29	12.60	1	NO	-0.83
221741	0.46	0.59	13.40	12.09	12.37	1	NO	0.82
221742	0.59	0.66	12.09	11.35	11.52	1	NO	-0.11
230779	0.38	0.44	14.22	13.60	14.09	1	NO	-0.98
230894	0.43	0.45	13.71	13.50	13.98	1	NO	-0.69
230916	0.39	0.48	14.12	13.20	13.63	1	NO	-0.27
244762	0.22	0.26	16.09	15.57	16.34	1	NO	-0.73
246643	0.91	0.91	7.64	7.64	7.29	1	NO	-0.54
246665	0.68	0.74	11.13	10.43	10.47	1	NO	0.08
248606	0.79	0.83	9.77	9.18	9.05	1	NO	0.20
251729	0.65	0.81	11.46	9.49	9.40	1	NO	2.85
251731	0.42	0.51	13.81	12.90	13.29	1	NO	-0.21
251766	0.46	0.58	13.40	12.19	12.48	1	NO	0.59
260805	0.57	0.56	12.29	12.40	12.72	1	NO	-0.40
260810	0.60	0.67	11.99	11.24	11.40	1	NO	-0.06
260817	0.38	0.38	14.20	14.22	14.80	4	NO	-0.04
260819	0.58	0.57	12.19	12.29	12.60	4	NO	-0.43
260848	0.37	0.39	14.33	14.12	14.68	1	NO	-0.54
260849	0.44	0.49	13.60	13.10	13.52	1	NO	-1.06
265035	0.71	0.56	10.79	12.40	12.72	1	NO	2.59
265082	0.63	0.62	11.73	11.83	12.07	4	NO	-0.55
265083	0.90	0.84	7.87	9.02	8.87	1	NO	0.73
265112	0.77	0.72	10.04	10.67	10.74	1	NO	0.15
265155	0.76	0.75	10.17	10.30	10.33	1	NO	-0.93
267220	0.70	0.66	10.90	11.35	11.52	1	NO	0.00
267503	0.45	0.45	13.50	13.50	13.98	1	NO	-0.29
268475	0.67	0.67	11.24	11.24	11.40	1	NO	-0.92
271568	0.72	0.74	10.67	10.43	10.47	1	NO	-0.83
271574	0.64	0.61	11.57	11.88	12.13	1	NO	-0.12
271578	0.83	0.84	9.18	9.02	8.87	1	NO	-0.60
271579	0.65	0.63	11.46	11.67	11.89	1	NO	-0.38
271587	0.41	0.35	13.91	14.57	15.19	4	NO	1.31

Rescore Analyses

Table E-21. 2009 MCAS: Rescore Analyses—English Language Arts

<i>Item Reference</i>	<i>Maximum Score</i>	<i>Old Mean</i>	<i>New Mean</i>	<i>Old SD</i>	<i>New SD</i>	<i>Effect Size</i>	<i>Absolute Difference</i>	<i>Discard?</i>
Grade 3								
220259	4	2.10	2.08	0.95	0.97	-0.02	0.01	NO
234903	4	2.36	2.32	1.09	1.07	-0.03	0.03	NO
231830	4	1.30	1.39	1.03	0.99	0.09	0.09	NO
214108	4	2.73	2.78	1.18	1.19	0.05	0.05	NO
Grade 4								
228281	4	1.92	1.99	0.82	0.99	0.08	0.07	NO
227667	4	1.80	1.69	1.01	0.93	-0.11	0.11	NO
227660	4	2.13	2.13	0.86	0.86	0.00	0.00	NO
244114	4	2.23	2.29	0.88	0.99	0.07	0.06	NO
256212	4	1.95	1.96	0.81	0.83	0.01	0.00	NO
225967	4	1.96	2.09	1.07	1.10	0.12	0.13	NO
Grade 5								
205153	4	2.00	2.14	0.85	0.86	0.15		NO
255425	4	2.15	1.96	0.99	1.09	-0.19		NO
208765	4	2.52	2.49	1.00	1.02	-0.03		NO
224817	4	2.13	2.09	0.92	0.90	-0.04		NO
205102	4	2.03	2.23	0.91	0.87	0.22		NO
224867	4	1.75	1.77	0.89	0.77	0.02		NO
Grade 6								
207339	4	2.06	2.01	0.95	1.02	-0.06		NO
250604	4	2.43	2.21	0.90	0.92	-0.25		NO
207508	4	2.05	2.04	1.02	1.03	-0.01		NO
207670	4	2.18	2.02	0.91	0.88	-0.18		NO
245085	4	2.19	2.13	1.06	1.04	-0.06		NO
207360	4	2.29	2.11	0.97	0.90	-0.18		NO
Grade 7								
224918	4	2.44	2.54	0.93	0.92	0.10	0.09	NO
225667	4	2.16	2.27	0.90	0.96	0.13	0.11	NO
225055	4	2.21	2.10	1.03	1.13	-0.11	0.12	NO
234009	4	2.24	2.16	0.99	1.00	-0.08	0.08	NO
225707	4	2.23	2.20	0.86	0.94	-0.03	0.02	NO
225597	4	2.12	2.05	1.10	1.13	-0.06	0.07	NO
Grade 8								
207639	4	2.65	2.76	1.05	1.01	0.11		NO
207124	4	2.10	2.23	1.05	1.01	0.13		NO
207248	4	2.65	2.86	1.04	0.85	0.20		NO
207193	4	2.45	2.50	0.96	0.94	0.06		NO
227783	4	2.47	2.67	1.02	1.01	0.20		NO
204185	4	2.06	2.20	0.95	1.00	0.14		NO
Grade 10								
228468	4	2.16	2.34	1.01	1.00	0.18		NO
253938	4	2.24	2.23	1.00	1.05	-0.01		NO
227212	4	2.70	2.57	1.02	1.02	-0.13		NO
227168	4	2.46	2.40	1.12	1.21	-0.06		NO

Table E-22. 2009 MCAS: Rescore Analyses—Mathematics

<i>Item Reference</i>	<i>Maximum Score</i>	<i>Old Mean</i>	<i>New Mean</i>	<i>Old SD</i>	<i>New SD</i>	<i>Effect Size</i>	<i>Absolute Difference</i>	<i>Discard?</i>
Grade 3								
203598	2	1.11	1.07	0.85	0.89	-0.05	0.04	NO
241026	2	1.41	1.39	0.73	0.77	-0.03	0.02	NO
218575	2	1.64	1.64	0.60	0.61	-0.01	0.00	NO
208002	2	1.60	1.55	0.74	0.78	-0.07	0.05	NO
218572	2	1.66	1.67	0.61	0.61	0.02	0.01	NO
Grade 4								
250547	4	2.35	2.34	1.60	1.60	-0.01	0.01	NO
219108	4	3.06	3.13	1.23	1.20	0.06	0.07	NO
229007	4	2.77	2.98	1.21	1.29	0.17	0.20	NO
227323	4	2.71	2.73	1.25	1.31	0.02	0.02	NO
227312	4	3.05	3.06	1.23	1.22	0.01	0.01	NO
Grade 5								
207742	4	2.02	2.10	1.38	1.37	0.06	0.08	NO
198686	4	2.35	2.33	1.42	1.43	-0.01	0.02	NO
198678	4	2.15	2.21	1.38	1.41	0.05	0.07	NO
261234	4	1.99	2.14	1.21	1.20	0.13	0.16	NO
248882	4	1.42	1.39	1.36	1.37	-0.03	0.04	NO
Grade 6								
229936	4	2.78	2.71	1.37	1.44	-0.05	0.07	NO
229754	4	2.12	2.15	1.46	1.47	0.02	0.02	NO
251475	4	2.37	2.42	1.35	1.29	0.04	0.05	NO
229928	4	3.08	3.06	1.09	1.08	-0.01	0.01	NO
223421	4	2.15	2.14	1.41	1.45	-0.01	0.01	NO
Grade 7								
250384	4	1.56	1.57	1.36	1.37	0.00	0.00	NO
208698	4	2.47	2.49	1.38	1.40	0.01	0.02	NO
208665	4	2.36	2.33	1.20	1.25	-0.02	0.03	NO
205689	4	2.44	2.32	1.54	1.59	-0.08	0.12	NO
250450	4	2.64	2.62	1.01	1.02	-0.02	0.02	NO
Grade 8								
253813	4	2.50	2.53	1.27	1.22	0.03	0.03	NO
265581	4	1.83	1.79	1.39	1.43	-0.03	0.04	NO
253811	4	1.76	1.80	1.46	1.49	0.03	0.04	NO
253768	4	2.30	2.24	1.51	1.54	-0.04	0.06	NO
228132	4	3.24	3.23	1.11	1.14	-0.01	0.01	NO
Grade 10								
229645	4	2.19	2.12	1.32	1.32	-0.05		NO
254553	4	1.93	1.89	1.36	1.33	-0.02		NO
251666	4	2.06	2.00	1.31	1.31	-0.04		NO
229564	4	1.88	1.85	1.30	1.40	-0.03		NO
254149	4	3.01	3.07	1.22	1.21	0.05		NO

Table E-23. 2009 MCAS: Rescore Analyses—Science and Technology/Engineering

<i>Item Reference</i>	<i>Maximum Score</i>	<i>Old Mean</i>	<i>New Mean</i>	<i>Old SD</i>	<i>New SD</i>	<i>Effect Size</i>	<i>Absolute Difference</i>	<i>Discard?</i>
Grade 5								
229272	4	1.94	1.92	1.25	1.29	-0.02	0.02	NO
245091	4	1.99	1.96	1.35	1.38	-0.02	0.03	NO
229060	4	2.02	2.24	1.32	1.33	0.17	0.22	NO
273773	4	2.40	2.44	1.32	1.37	0.03	0.04	NO
Grade 8								
246325	4	2.19	2.20	1.40	1.25	0.00	0.00	NO
229478	4	1.85	1.77	1.17	1.14	-0.07	0.08	NO
265258	4	1.98	2.01	1.40	1.40	0.02	0.03	NO
265290	4	2.34	2.48	1.11	1.11	0.13	0.14	NO
229455	4	2.50	2.50	1.06	1.00	0.00	0.00	NO

Table E-24. 2009 MCAS: Rescore Analyses—High School Biology (Grades 9–11)

<i>Item Reference</i>	<i>Maximum Score</i>	<i>Old Mean</i>	<i>New Mean</i>	<i>Old SD</i>	<i>New SD</i>	<i>Effect Size</i>	<i>Absolute Difference</i>	<i>Discard?</i>
219830	4	1.63	1.59	0.93	0.91	-0.04		NO
256965	4	2.04	1.99	0.97	0.94	-0.05		NO
261241	4	2.60	2.58	1.12	1.13	-0.01		NO
241739	4	1.22	1.12	0.97	1.04	-0.11		NO
248970	4	1.53	1.43	0.99	1.03	-0.10		NO

Table E-25. 2009 MCAS: Rescore Analyses—High School Chemistry (Grades 9–11)

<i>Item Reference</i>	<i>Maximum Score</i>	<i>Old Mean</i>	<i>New Mean</i>	<i>Old SD</i>	<i>New SD</i>	<i>Effect Size</i>	<i>Absolute Difference</i>	<i>Discard?</i>
258922	4	1.47	1.37	1.19	1.20	-0.08		NO
274045	4	1.79	1.72	1.14	1.18	-0.06		NO
206688	4	1.06	1.00	1.45	1.44	-0.04		NO
244944	4	1.19	1.25	1.18	1.19	0.05		NO
261661	4	2.22	2.11	1.34	1.35	-0.08		NO

Table E-26. 2009 MCAS: Rescore Analyses—High School Introductory Physics (Grades 9–11)

<i>Item Reference</i>	<i>Maximum Score</i>	<i>Old Mean</i>	<i>New Mean</i>	<i>Old SD</i>	<i>New SD</i>	<i>Effect Size</i>	<i>Absolute Difference</i>	<i>Discard?</i>
261500	4	1.84	1.87	1.04	1.01	0.03		NO
261149	4	2.04	2.02	1.40	1.42	-0.01		NO
261283	4	1.70	1.53	1.15	1.09	-0.15		NO
261282	4	2.04	2.02	1.34	1.55	-0.02		NO
261144	4	2.24	2.24	1.19	1.16	0.00		NO

Table E-27. 2009 MCAS: Rescore Analyses—High School Technology/Engineering (Grades 9–11)

<i>Item Reference</i>	<i>Maximum Score</i>	<i>Old Mean</i>	<i>New Mean</i>	<i>Old SD</i>	<i>New SD</i>	<i>Effect Size</i>	<i>Absolute Difference</i>	<i>Discard?</i>
260817	4	1.54	1.56	1.07	1.12	0.02		NO
271587	4	1.56	1.59	1.01	0.97	0.02		NO
265082	4	2.45	2.80	1.33	1.20	0.26		NO
260819	4	2.39	2.19	0.99	1.07	-0.21		NO
206792	4	1.20	1.19	0.97	1.02	-0.02		NO

