Appendix 18

Online Tests Comparability Study

Table 1

2006 Comparability Study Results for Grade 8 Reading

Paper Test Raw Score	Equated Online Test Raw Score	Standard Deviation of Online Raw Scores	Paper Test Scale Score	Online Test Scale Score	Standard Deviation of Online Scale Scores	Difference in Raw Scores	Difference in Scale Scores	Significant Difference	Final Online Scale Score
0	0.30	0.02	1165.77	1213.11	2.52	0.30	47.34	**	1166
1	1.02	0.05	1321.32	1322.80	6.43	0.02	1.48		1323
2	2.04	0.09	1432.83	1435.00	7.55	0.04	2.17		1435
3	3.08	0.13	1500.12	1503.49	7.00	0.08	3.37		1503
4	4.11	0.16	1549.34	1553.51	6.76	0.11	4.17		1554
5	5.15	0.19	1588.66	1593.45	6.61	0.15	4.79		1593
6	6.19	0.22	1621.76	1627.06	6.50	0.19	5.30		1627
7	7.23	0.24	1650.58	1656.32	6.42	0.23	5.74		1656
8	8.26	0.27	1676.30	1682.41	6.35	0.26	6.11		1682
9	9.30	0.29	1699.67	1706.12	6.28	0.30	6.45		1706
10	10.34	0.31	1721.21	1727.99	6.25	0.34	6.78		1728
11	11.37	0.32	1741.38	1748.39	6.17	0.37	7.01		1748
12	12.41	0.34	1760.27	1767.53	6.12	0.41	7.26		1768
13	13.44	0.35	1778.19	1785.69	6.08	0.44	7.50		1786
14	14.47	0.37	1795.33	1803.05	6.04	0.47	7.72		1803
15	15.50	0.38	1811.82	1819.74	6.00	0.50	7.92		1820
16	16.52	0.38	1827.77	1835.88	5.95	0.52	8.11		1836
17	17.55	0.39	1843.26	1851.56	5.92	0.55	8.30		1852
18	18.57	0.40	1858.38	1866.86	5.88	0.57	8.48		1867
19	19.59	0.40	1873.20	1881.85	5.85	0.59	8.65		1882
20	20.61	0.40	1887.78	1896.59	5.82	0.61	8.81		1897
21	21.63	0.41	1902.18	1911.14	5.78	0.63	8.96		1911
22	22.64	0.41	1916.44	1925.55	5.75	0.64	9.11		1926
23	23.66	0.40	1930.60	1939.87	5.72	0.66	9.27		1940
24	24.67	0.40	1944.74	1954.15	5.70	0.67	9.41		1954
25	25.67	0.40	1958.89	1968.44	5.67	0.67	9.55		1968
26	26.68	0.39	1973.09	1982.78	5.64	0.68	9.69		1983
27	27.68	0.39	1987.39	1997.22	5.62	0.68	9.83		2006
28	28.68	0.38	2001.84	2011.81	5.59	0.68	9.97		2012
29	29.68	0.37	2016.50	2026.60	5.57	0.68	10.10		2027
30	30.67	0.36	2031.41	2041.64	5.55	0.67	10.23		2051
31	31.66	0.35	2046.64	2057.01	5.53	0.66	10.37		2057
32	32.65	0.34	2062.26	2072.75	5.51	0.65	10.49		2073
33	33.64	0.33	2078.34	2088.97	5.49	0.64	10.63		2100
34	34.62	0.31	2094.99	2105.76	5.47	0.62	10.77		2106
35	35.60	0.30	2112.32	2123.21	5.46	0.60	10.89		2123
36	36.58	0.28	2130.45	2141.48	5.44	0.58	11.03	**	2141
37	37.55	0.27	2149.55	2160.73	5.43	0.55	11.18	**	2161
38	38.52	0.25	2169.85	2181.17	5.43	0.52	11.32	**	2181
39	39.49	0.23	2191.60	2203.08	5.43	0.49	11.48	**	2203
40	40.45	0.21	2215.19	2226.85	5.45	0.45	11.66	**	2227
41	41.41	0.19	2241.14	2253.00	5.48	0.41	11.86	**	2253
42	42.36	0.17	2270.19	2282.29	5.54	0.36	12.10	**	2282
43	43.31	0.14	2303.51	2315.92	5.63	0.31	12.41	**	2316
44	44.26	0.12	2343.06	2355.93	5.80	0.26	12.87	**	2400
45	45.20	0.09	2392.48	2406.15	6.12	0.20	13.67	**	2406
46	46.14	0.06	2459.97	2475.60	6.96	0.14	15.63	**	2476
47	47.07	0.03	2571.66	2582.80	4.96	0.07	11.14	**	2583
48	47.72	0.01	2725.39	2682.70	1.53	-0.28	-42.69	**	2725

Table 2

2006 Comparability Study Results for Grade 8 Mathematics

Paper Test Raw Score	Equated Online Test Raw Score	Standard Deviation of Online Raw Scores	Paper Test Scale Score	Online Test Scale Score	Standard Deviation of Online Scale Scores	Difference in Raw Scores	Difference in Scale Scores	Significant Difference	Final Online Scale Score
0	0.39	0.02	1238.01	1298.56	2.98	0.39	60.55	**	1238
1	1.29	0.06	1393.79	1425.70	6.76	0.29	31.91	**	1426
2	2.55	0.11	1505.15	1542.03	7.62	0.55	36.88	**	1542
3	3.79	0.16	1572.33	1611.07	7.68	0.79	38.74	**	1611
4	5.01	0.20	1621.46	1660.65	7.22	1.01	39.19	**	1661
5	6.22	0.24	1660.72	1699.94	6.99	1.22	39.22	**	1700
6	7.40	0.27	1693.86	1732.89	6.93	1.40	39.03	**	1733
7	8.57	0.30	1722.59	1761.60	6.89	1.57	39.01	**	1762
8	9.73	0.32	1748.24	1787.23	6.83	1.73	38.99	**	1787
9	10.88	0.34	1771.55	1810.50	6.76	1.88	38.95	**	1811
10	12.01	0.36	1793.04	1831.94	6.69	2.01	38.90	**	1832
11	13.13	0.38	1813.08	1851.92	6.64	2.13	38.84	**	1852
12	14.23	0.40	1831.94	1870.72	6.59	2.23	38.78	**	1871
13	15.33	0.41	1849.83	1888.52	6.53	2.33	38.69	**	1889
14	16.42	0.42	1866.92	1905.50	6.50	2.42	38.58	**	1906
15	17.49	0.43	1883.33	1921.84	6.47	2.49	38.51	**	1922
16	18.56	0.44	1899.11	1937.62	6.44	2.56	38.51	**	1938
17	19.62	0.45	1914.47	1952.92	6.41	2.62	38.45	**	1953
18	20.66	0.45	1929.44	1967.84	6.38	2.66	38.40	**	1968
19	21.70	0.46	1944.08	1982.43	6.36	2.70	38.35	**	1982
20	22.73	0.46	1958.45	1996.76	6.34	2.73	38.31	**	1997
21	23.76	0.46	1972.60	2010.89	6.32	2.76	38.29	**	2015
22	24.77	0.46	1986.59	2024.85	6.30	2.77	38.26	**	2025
23	25.78	0.46	2000.46	2038.70	6.29	2.78	38.24	**	2039
24	26.78	0.45	2014.25	2052.47	6.28	2.78	38.22	**	2057
25	27.77	0.45	2028.00	2066.22	6.27	2.77	38.22	**	2066
26	28.75	0.45	2041.75	2079.98	6.26	2.75	38.23	**	2080
27	29.73	0.44	2055.55	2093.79	6.25	2.73	38.24	**	2100
28	30.70	0.43	2069.42	2107.69	6.25	2.70	38.27	**	2108
29	31.66	0.42	2083.43	2121.72	6.25	2.66	38.29	**	2122
30	32.62	0.42	2097.60	2135.94	6.25	2.62	38.34	**	2136
31	33.57	0.41	2111.99	2150.39	6.25	2.57	38.40	**	2150
32	34.51	0.39	2126.65	2165.12	6.26	2.51	38.47	**	2165
33	35.44	0.38	2141.64	2180.20	6.27	2.44	38.56	**	2180
34	36.37	0.37	2157.02	2195.68	6.28	2.37	38.66	**	2196
35	37.29	0.35	2172.88	2211.66	6.30	2.29	38.78	**	2212
36	38.20	0.34	2189.31	2228.22	6.32	2.20	38.91	**	2228
37	39.11	0.32	2206.40	2245.47	6.33	2.11	39.07	**	2245
38	40.01	0.31	2224.31	2263.54	6.35	2.01	39.23	**	2264
39	40.90	0.29	2243.18	2282.61	6.35	1.90	39.43	**	2283
40	41.78	0.27	2263.23	2302.90	6.35	1.78	39.67	**	2303
41	42.65	0.25	2284.73	2324.71	6.37	1.65	39.98	**	2325
42	43.51	0.22	2308.06	2348.39	6.43	1.51	40.33	**	2348
43	44.36	0.20	2333.73	2374.44	6.58	1.36	40.71	**	2400
44	45.20	0.18	2362.48	2403.55	6.75	1.20	41.07	**	2404
45	46.03	0.15	2395.49	2436.83	6.77	1.03	41.34	**	2437
46	46.85	0.12	2434.69	2476.73	6.31	0.85	42.04	**	2477
47	47.66	0.09	2483.74	2528.22	6.34	0.66	44.48	**	2528
48	48.46	0.06	2551.00	2601.66	7.16	0.46	50.66	**	2602
49	49.24	0.03	2662.28	2698.94	5.14	0.24	36.66	**	2699
50	49.77	0.01	2818.19	2782.67	1.57	-0.23	-35.52	**	2818

Table 3

2006 Comparability Study Results for Grade 8 Science

Paper Test Raw Score	Equated Online Test Raw Score	Standard Deviation of Online Raw Scores	Paper Test Scale Score	Online Test Scale Score	Standard Deviation of Online Scale Scores	Difference in Raw Scores	Difference in Scale Scores	Significant Difference	Final Online Scale Score
0	0.32	0.01	868.09	936.63	2.12	0.32	68.54	**	868
1	1.07	0.03	1081.40	1091.74	4.88	0.07	10.34	**	1092
2	2.13	0.06	1234.56	1246.20	5.58	0.13	11.64	**	1246
3	3.18	0.09	1326.89	1338.85	5.81	0.18	11.96	**	1339
4	4.22	0.11	1394.36	1406.33	5.90	0.22	11.97	**	1406
5	5.26	0.13	1448.21	1460.07	5.94	0.26	11.86		1460
6	6.30	0.15	1493.49	1505.19	5.95	0.30	11.70		1505
7	7.33	0.17	1532.87	1544.39	5.94	0.33	11.52		1544
8	8.36	0.19	1567.96	1579.29	5.93	0.36	11.33		1579
9	9.38	0.20	1599.80	1610.94	5.92	0.38	11.14		1611
10	10.40	0.22	1629.10	1640.06	5.90	0.40	10.96		1640
11	11.42	0.23	1656.38	1667.16	5.88	0.42	10.78		1667
12	12.44	0.24	1682.02	1692.62	5.86	0.44	10.60		1693
13	13.45	0.25	1706.30	1716.74	5.85	0.45	10.44		1717
14	14.46	0.26	1729.46	1739.74	5.83	0.46	10.28		1740
15	15.47	0.27	1751.68	1761.85	5.84	0.47	10.17		1762
16	16.48	0.28	1773.19	1783.16	5.80	0.48	9.97		1783
17	17.49	0.29	1793.94	1803.77	5.78	0.49	9.83		1804
18	18.49	0.29	1814.14	1823.84	5.77	0.49	9.70		1824
19	19.49	0.30	1833.89	1843.46	5.77	0.49	9.57		1843
20	20.49	0.30	1853.27	1862.71	5.76	0.49	9.44		1863
21	21.49	0.31	1872.35	1881.66	5.75	0.49	9.31		1882
22	22.49	0.31	1891.20	1900.39	5.74	0.49	9.19		1900
23	23.49	0.31	1909.88	1918.94	5.73	0.49	9.06		1919
24	24.48	0.31	1928.44	1937.39	5.73	0.48	8.95		1937
25	25.48	0.31	1946.95	1955.78	5.72	0.48	8.83		1956
26	26.47	0.31	1965.46	1974.17	5.72	0.47	8.71		1984
27	27.46	0.31	1984.02	1992.61	5.71	0.46	8.59		1993
28	28.45	0.30	2002.69	2011.16	5.71	0.45	8.47		2011
29	29.44	0.30	2021.53	2029.90	5.72	0.44	8.37		2041
30	30.43	0.29	2040.64	2048.89	5.71	0.43	8.25		2049
31	31.41	0.29	2060.03	2068.17	5.71	0.41	8.14		2068
32	32.40	0.28	2079.79	2087.81	5.71	0.40	8.02		2100
33	33.38	0.28	2100.01	2107.92	5.71	0.38	7.91		2108
34	34.36	0.27	2120.77	2128.57	5.72	0.36	7.80		2129
35	35.35	0.26	2142.20	2149.89	5.72	0.35	7.69		2150
36	36.33	0.25	2164.41	2171.99	5.73	0.33	7.58		2172
37	37.31	0.24	2187.55	2195.02	5.74	0.31	7.47		2195
38	38.29	0.23	2211.81	2219.17	5.75	0.29	7.36		2219
39	39.27	0.21	2237.41	2244.66	5.77	0.27	7.25		2245
40	40.24	0.20	2264.65	2271.80	5.80	0.24	7.15		2272
41	41.22	0.19	2293.91	2300.96	5.83	0.22	7.05		2301
42	42.20	0.17	2325.69	2332.65	5.88	0.20	6.96		2333
43	43.17	0.15	2360.71	2367.60	5.94	0.17	6.89		2400
44	44.15	0.14	2400.01	2406.84	6.02	0.15	6.83		2407
45	45.13	0.12	2445.18	2451.98	6.13	0.13	6.80		2452
46	46.10	0.10	2498.92	2505.78	6.31	0.10	6.86		2506
47	47.08	0.07	2566.23	2573.32	6.64	0.08	7.09		2573
48	48.05	0.05	2658.40	2666.33	7.47	0.05	7.93		2666
49	49.02	0.03	2811.37	2816.81	5.48	0.02	5.44		2817
50	49.71	0.01	3023.99	2961.79	1.77	-0.29	-62.20	**	3024

Table 4

2006 Comparability Study Results for Grade 8 Social Studies

Paper Test Raw Score	Equated Online Test Raw Score	Standard Deviation of Online Raw Scores	Paper Test Scale Score	Online Test Scale Score	Standard Deviation of Online Scale Scores	Difference in Raw Scores	Difference in Scale Scores	Significant Difference	Final Online Scale Score
0	0.33	0.01	1361.47	1411.05	1.81	0.33	49.58	**	1361
1	1.10	0.04	1511.18	1521.85	4.10	0.10	10.67	**	1522
2	2.20	0.08	1615.83	1628.28	4.74	0.20	12.45	**	1628
3	3.29	0.11	1678.71	1691.93	4.99	0.29	13.22	**	1692
4	4.37	0.14	1724.53	1738.11	5.08	0.37	13.58	**	1738
5	5.45	0.17	1760.87	1774.76	5.15	0.45	13.89	**	1775
6	6.53	0.19	1791.49	1805.55	5.17	0.53	14.06	**	1806
7	7.60	0.22	1818.09	1832.26	5.16	0.60	14.17	**	1832
8	8.66	0.24	1841.77	1856.00	5.14	0.66	14.23	**	1856
9	9.72	0.26	1863.24	1877.52	5.11	0.72	14.28	**	1878
10	10.78	0.28	1883.01	1897.30	5.08	0.78	14.29	**	1897
11	11.83	0.30	1901.40	1915.71	5.06	0.83	14.31	**	1916
12	12.88	0.31	1918.70	1933.01	5.03	0.88	14.31	**	1933
13	13.92	0.33	1935.09	1949.39	5.01	0.92	14.30	**	1949
14	14.95	0.34	1950.73	1965.01	4.99	0.95	14.28	**	1965
15	15.99	0.35	1965.75	1980.02	4.98	0.99	14.27	**	1980
16	17.02	0.36	1980.26	1994.50	4.96	1.02	14.24	**	1995
17	18.04	0.36	1994.33	2008.55	4.95	1.04	14.22	**	2016
18	19.06	0.37	2008.05	2022.24	4.94	1.06	14.19	**	2022
19	20.07	0.38	2021.49	2035.64	4.92	1.07	14.15	**	2036
20	21.09	0.38	2034.69	2048.79	4.91	1.09	14.10	**	2058
21	22.09	0.38	2047.71	2061.76	4.90	1.09	14.05	**	2062
22	23.10	0.38	2060.59	2074.60	4.89	1.10	14.01	**	2075
23	24.09	0.38	2073.39	2087.35	4.89	1.09	13.96	**	2087
24	25.09	0.38	2086.15	2100.06	4.88	1.09	13.91	**	2100
25	26.08	0.38	2098.91	2112.76	4.87	1.08	13.85	**	2113
26	27.07	0.38	2111.71	2125.49	4.86	1.07	13.78	**	2125
27	28.05	0.37	2124.59	2138.30	4.86	1.05	13.71	**	2138
28	29.03	0.36	2137.60	2151.25	4.85	1.03	13.65	**	2151
29	30.01	0.36	2150.79	2164.36	4.85	1.01	13.57	**	2164
30	30.98	0.35	2164.21	2177.71	4.84	0.98	13.50	**	2178
31	31.95	0.34	2177.92	2191.34	4.83	0.95	13.42	**	2191
32	32.92	0.33	2191.98	2205.32	4.83	0.92	13.34	**	2205
33	33.88	0.32	2206.47	2219.72	4.82	0.88	13.25	**	2220
34	34.84	0.30	2221.47	2234.63	4.81	0.84	13.16	**	2235
35	35.80	0.29	2237.08	2250.16	4.81	0.80	13.08	**	2250
36	36.75	0.28	2253.44	2266.44	4.80	0.75	13.00	**	2266
37	37.70	0.26	2270.71	2283.62	4.79	0.70	12.91	**	2284
38	38.65	0.24	2289.07	2301.91	4.79	0.65	12.84	**	2302
39	39.60	0.22	2308.79	2321.57	4.80	0.60	12.78	**	2322
40	40.54	0.20	2330.22	2342.96	4.81	0.54	12.74	**	2343
41	41.48	0.18	2353.85	2366.58	4.84	0.48	12.73	**	2367
42	42.42	0.16	2380.39	2393.15	4.89	0.42	12.76	**	2400
43	43.35	0.14	2410.95	2423.81	4.97	0.35	12.86	**	2424
44	44.29	0.11	2447.36	2460.46	5.11	0.29	13.10	**	2460
45	45.22	0.09	2493.07	2506.75	5.39	0.22	13.68	**	2507
46	46.15	0.06	2555.85	2571.24	6.12	0.15	15.39	**	2571
47	47.07	0.03	2660.39	2671.24	4.36	0.07	10.85	**	2671
48	47.72	0.01	2805.94	2765.56	1.33	-0.28	-40.38	**	2806

Table 5

2006 Comparability Study Results for Grade 9 Reading

Paper Test Raw Score	Equated Online Test Raw Score	Standard Deviation of Online Raw Scores	Paper Test Scale Score	Online Test Scale Score	Standard Deviation of Online Scale Scores	Difference in Raw Scores	Difference in Scale Scores	Significant Difference	Final Online Scale Score
0	0.34	0.02	1341.69	1384.49	2.28	0.34	42.80	**	1342
1	1.14	0.06	1466.37	1478.78	5.10	0.14	12.41	**	1479
2	2.25	0.10	1557.99	1572.05	5.57	0.25	14.06	**	1572
3	3.35	0.13	1614.26	1628.84	5.57	0.35	14.58	**	1629
4	4.43	0.16	1656.12	1670.88	5.46	0.43	14.76	**	1671
5	5.51	0.18	1690.14	1704.95	5.32	0.51	14.81	**	1705
6	6.57	0.20	1719.25	1734.05	5.18	0.57	14.81	**	1734
7	7.63	0.22	1745.03	1759.80	5.02	0.63	14.77	**	1760
8	8.68	0.23	1768.41	1783.13	4.88	0.68	14.72	**	1783
9	9.73	0.24	1790.02	1804.68	4.75	0.73	14.66	**	1805
10	10.76	0.24	1810.26	1824.87	4.64	0.76	14.61	**	1825
11	11.79	0.25	1829.47	1844.00	4.53	0.79	14.53	**	1844
12	12.82	0.25	1847.85	1862.30	4.44	0.82	14.45	**	1862
13	13.83	0.25	1865.59	1879.95	4.35	0.83	14.37	**	1880
14	14.85	0.25	1882.84	1897.10	4.27	0.85	14.26	**	1897
15	15.85	0.25	1899.72	1913.86	4.20	0.85	14.14	**	1914
16	16.85	0.25	1916.33	1930.35	4.13	0.85	14.02	**	1930
17	17.85	0.25	1932.77	1946.65	4.07	0.85	13.88	**	1947
18	18.84	0.25	1949.14	1962.85	4.01	0.84	13.71	**	1963
19	19.82	0.24	1965.49	1979.04	3.96	0.82	13.55	**	1979
20	20.80	0.23	1981.94	1995.30	3.91	0.80	13.36	**	1995
21	21.78	0.23	1998.55	2011.70	3.86	0.78	13.15	**	2021
22	22.75	0.22	2015.41	2028.35	3.81	0.75	12.94	**	2028
23	23.72	0.21	2032.61	2045.32	3.77	0.72	12.71	**	2059
24	24.68	0.20	2050.26	2062.74	3.73	0.68	12.48	**	2063
25	25.65	0.19	2068.48	2080.73	3.69	0.65	12.25	**	2081
26	26.61	0.18	2087.42	2099.42	3.65	0.61	12.00	**	2100
27	27.56	0.17	2107.23	2119.00	3.62	0.56	11.77	**	2119
28	28.52	0.16	2128.12	2139.68	3.60	0.52	11.56	**	2140
29	29.47	0.15	2150.37	2161.72	3.57	0.47	11.35	**	2162
30	30.43	0.14	2174.29	2185.48	3.55	0.43	11.19	**	2185
31	31.38	0.12	2200.35	2211.42	3.54	0.38	11.07	**	2211
32	32.34	0.11	2229.15	2240.14	3.53	0.34	10.99	**	2240
33	33.30	0.10	2261.50	2272.50	3.55	0.30	11.00	**	2273
34	34.25	0.08	2298.68	2309.77	3.62	0.25	11.09	**	2310
35	35.21	0.07	2342.57	2353.85	3.80	0.21	11.28	**	2400
36	36.16	0.06	2396.40	2408.02	4.24	0.16	11.62	**	2408
37	37.12	0.05	2466.86	2479.39	5.28	0.12	12.53	**	2479
38	38.06	0.03	2574.33	2596.86	11.11	0.06	22.53	**	2597
39	39.22	0.13	2923.41	3006.06	49.83	0.22	82.66		3006
40	41.28	0.36	3299.36	3515.02	58.69	1.28	215.67	**	3299
41	41.75	0.17	3471.94	3588.83	26.31	0.75	116.89	**	3472
42	41.94	0.05	3627.72	3617.89	7.56	-0.06	-9.83		3628

Table 6

2006 Comparability Study Results for Grade 9 Mathematics

Paper Test Raw Score	Equated Online Test Raw Score	Standard Deviation of Online Raw Scores	Paper Test Scale Score	Online Test Scale Score	Standard Deviation of Online Scale Scores	Difference in Raw Scores	Difference in Scale Scores	Significant Difference	Final Online Scale Score
0	0.37	0.01	1034.04	1103.35	1.51	0.37	69.31	**	1034
1	1.21	0.02	1223.62	1251.74	3.35	0.21	28.12	**	1252
2	2.39	0.05	1358.29	1390.19	3.73	0.39	31.90	**	1390
3	3.55	0.06	1439.68	1472.76	3.80	0.55	33.08	**	1473
4	4.70	0.08	1499.45	1532.78	3.78	0.70	33.33	**	1533
5	5.82	0.09	1547.33	1580.54	3.73	0.82	33.21	**	1581
6	6.93	0.10	1587.70	1620.54	3.57	0.93	32.84	**	1621
7	8.03	0.11	1622.90	1655.25	3.41	1.03	32.35	**	1655
8	9.12	0.12	1654.34	1686.15	3.32	1.12	31.81	**	1686
9	10.20	0.13	1682.92	1714.21	3.27	1.20	31.29	**	1714
10	11.27	0.14	1709.25	1740.07	3.23	1.27	30.82	**	1740
11	12.33	0.15	1733.79	1764.17	3.21	1.33	30.38	**	1764
12	13.39	0.15	1756.87	1786.83	3.18	1.39	29.96	**	1787
13	14.44	0.16	1778.73	1808.30	3.15	1.44	29.57	**	1808
14	15.48	0.16	1799.57	1828.78	3.13	1.48	29.21	**	1829
15	16.51	0.17	1819.57	1848.43	3.10	1.51	28.86	**	1848
16	17.55	0.17	1838.83	1867.37	3.08	1.55	28.54	**	1867
17	18.57	0.17	1857.48	1885.71	3.06	1.57	28.23	**	1886
18	19.59	0.18	1875.61	1903.55	3.04	1.59	27.94	**	1904
19	20.61	0.18	1893.29	1920.96	3.02	1.61	27.67	**	1921
20	21.62	0.18	1910.59	1938.01	3.00	1.62	27.42	**	1938
21	22.63	0.18	1927.58	1954.77	2.99	1.63	27.19	**	1955
22	23.64	0.18	1944.32	1971.28	2.97	1.64	26.96	**	1971
23	24.64	0.18	1960.84	1987.61	2.96	1.64	26.77	**	2000
24	25.64	0.18	1977.21	2003.78	2.95	1.64	26.57	**	2004
25	26.63	0.18	1993.46	2019.86	2.93	1.63	26.40	**	2020
26	27.62	0.18	2009.64	2035.88	2.93	1.62	26.24	**	2050
27	28.61	0.18	2025.79	2051.89	2.92	1.61	26.10	**	2052
28	29.60	0.18	2041.96	2067.93	2.91	1.60	25.97	**	2068
29	30.58	0.18	2058.18	2084.04	2.90	1.58	25.86	**	2084
30	31.56	0.17	2074.51	2100.28	2.90	1.56	25.77	**	2100
31	32.53	0.17	2090.99	2116.68	2.90	1.53	25.69	**	2117
32	33.50	0.17	2107.68	2133.29	2.90	1.50	25.61	**	2133
33	34.47	0.16	2124.62	2150.18	2.90	1.47	25.56	**	2150
34	35.43	0.16	2141.88	2167.39	2.90	1.43	25.51	**	2167
35	36.40	0.16	2159.52	2185.01	2.90	1.40	25.49	**	2185
36	37.35	0.15	2177.63	2203.11	2.91	1.35	25.48	**	2203
37	38.31	0.15	2196.30	2221.77	2.92	1.31	25.47	**	2222
38	39.25	0.14	2215.63	2241.11	2.93	1.25	25.48	**	2241
39	40.20	0.13	2235.75	2261.25	2.94	1.20	25.50	**	2261
40	41.14	0.13	2256.82	2282.35	2.94	1.14	25.53	**	2282
41	42.08	0.12	2279.04	2304.62	2.95	1.08	25.58	**	2305
42	43.01	0.11	2302.65	2328.43	2.93	1.01	25.78	**	2328
43	43.93	0.10	2328.14	2353.91	2.87	0.93	25.77	**	2354
44	44.86	0.09	2355.69	2381.65	2.83	0.86	25.96	**	2400
45	45.77	0.08	2386.03	2412.30	2.84	0.77	26.27	**	2412
46	46.68	0.07	2420.08	2446.76	2.87	0.68	26.68	**	2447
47	47.59	0.06	2459.22	2486.51	2.91	0.59	27.29	**	2487
48	48.48	0.05	2505.79	2534.03	2.99	0.48	28.24	**	2534
49	49.37	0.04	2564.19	2594.15	3.15	0.37	29.96	**	2594
50	50.26	0.03	2644.23	2678.53	3.58	0.26	34.30	**	2679
51	51.13	0.01	2777.30	2802.13	2.57	0.13	24.83	**	2802
52	51.74	0.00	2963.78	2915.46	0.78	-0.26	-48.32	**	2964

Table 7

July 2006 Comparability Study Results for Exit Level ELA

Paper Test Raw Score	Equated Online Test Raw Score	Standard Deviation of Online Raw Scores	Paper Test Scale Score	Online Test Scale Score	Standard Deviation of Online Scale Scores	Difference in Raw Scores	Difference in Scale Scores	Significant Difference	Final Online Scale Score
0	0.436	0.056	1402.50	1451.82	6.37	0.436	49.32	**	1403
1	1.405	0.155	1515.63	1548.64	12.57	0.405	33.01	**	1516
2	2.698	0.246	1597.23	1631.15	11.43	0.698	33.92	**	1597
3	3.913	0.304	1646.20	1678.12	9.84	0.913	31.92	**	1646
4	5.071	0.343	1681.83	1711.38	8.70	1.071	29.55	**	1682
5	6.186	0.370	1710.17	1737.50	7.89	1.186	27.33	**	1710
6	7.269	0.389	1733.89	1759.23	7.26	1.269	25.34	**	1734
7	8.326	0.404	1754.45	1777.99	6.76	1.326	23.54	**	1754
8	9.363	0.416	1772.70	1794.61	6.35	1.363	21.91	**	1773
9	10.383	0.425	1789.19	1809.63	6.01	1.383	20.44	**	1789
10	11.391	0.433	1804.31	1823.40	5.71	1.391	19.09	**	1804
11	12.387	0.440	1818.33	1836.17	5.48	1.387	17.84	**	1818
12	13.374	0.446	1831.43	1848.16	5.27	1.374	16.73	**	1831
13	14.354	0.452	1843.80	1859.47	5.09	1.354	15.67	**	1844
14	15.328	0.457	1855.54	1870.24	4.94	1.328	14.70	**	1856
15	16.296	0.461	1866.74	1880.53	4.81	1.296	13.79	**	1867
16	17.260	0.465	1877.50	1890.43	4.69	1.260	12.93	**	1878
17	18.220	0.469	1887.85	1899.98	4.59	1.220	12.13	**	1888
18	19.177	0.472	1897.87	1909.24	4.50	1.177	11.37	**	1898
19	20.131	0.475	1907.59	1918.25	4.43	1.131	10.66	**	1908
20	21.083	0.477	1917.06	1927.04	4.36	1.083	9.98	**	1917
21	22.033	0.479	1926.32	1935.64	4.30	1.033	9.32	**	1926
22	22.981	0.481	1935.38	1944.08	4.24	0.981	8.70	**	1935
23	23.927	0.482	1944.28	1952.38	4.20	0.927	8.10	**	1944
24	24.873	0.483	1953.04	1960.57	4.15	0.873	7.53		1953
25	25.817	0.483	1961.69	1968.66	4.11	0.817	6.97		1962
26	26.761	0.483	1970.23	1976.67	4.08	0.761	6.44		1970
27	27.704	0.482	1978.71	1984.63	4.05	0.704	5.92		1979
28	28.646	0.481	1987.13	1992.54	4.03	0.646	5.41		1987
29	29.589	0.479	1995.51	2000.42	4.00	0.589	4.91		1996
30	30.531	0.477	2003.86	2008.28	3.97	0.531	4.42		2004
31	31.473	0.474	2012.19	2016.14	3.96	0.473	3.95		2012
32	32.416	0.471	2020.53	2024.01	3.94	0.416	3.48		2021
33	33.359	0.467	2028.90	2031.92	3.92	0.359	3.02		2029
34	34.302	0.462	*2037.31*	*2039.86*	3.91	0.302	2.55		*2045*
35	35.246	0.457	2045.76	2047.86	3.89	0.246	2.10		2046
36	36.190	0.452	2054.29	2055.93	3.88	0.190	1.64		2054
37	37.135	0.445	2062.90	2064.09	3.87	0.135	1.19		2063
38	38.081	0.438	*2071.63*	*2072.36*	3.86	0.081	0.73		*2072*
39	39.027	0.430	2080.47	2080.74	3.84	0.027	0.27		2080
40	39.975	0.422	2089.46	2089.26	3.83	-0.025	-0.20		2089
41	40.923	0.413	**2098.62**	**2097.94**	3.82	-0.077	-0.68		**2100**
42	41.873	0.404	2107.96	2106.80	3.81	-0.127	-1.16		2108
43	42.824	0.393	2117.52	2115.86	3.80	-0.176	-1.66		2118
44	43.775	0.382	2127.34	2125.15	3.79	-0.225	-2.19		2127
45	44.728	0.371	2137.43	2134.70	3.77	-0.272	-2.73		2137

46	45.682	0.359	2147.83	2144.54	3.76	-0.318	-3.29		2148
47	46.637	0.347	2158.59	2154.70	3.75	-0.363	-3.89		2159
48	47.593	0.334	2169.75	2165.21	3.74	-0.407	-4.54		2170
49	48.549	0.321	2181.35	2176.13	3.73	-0.451	-5.22		2181
50	49.506	0.308	2193.45	2187.48	3.73	-0.494	-5.97		2193
51	50.463	0.295	2206.13	2199.33	3.74	-0.537	-6.80		2206
52	51.421	0.282	2219.44	2211.74	3.75	-0.579	-7.70	**	2219
53	52.378	0.271	2233.45	2224.74	3.78	-0.622	-8.71	**	2233
54	53.335	0.260	2248.29	2238.43	3.85	-0.665	-9.86	**	2248
55	54.292	0.251	2264.01	2252.89	3.93	-0.708	-11.12	**	2264
56	55.248	0.244	2280.73	2268.17	4.05	-0.752	-12.56	**	2281
57	56.204	0.240	2298.55	2284.39	4.23	-0.796	-14.16	**	2299
58	57.161	0.238	2317.57	2301.65	4.46	-0.839	-15.92	**	2318
59	58.121	0.240	2337.87	2320.09	4.78	-0.879	-17.78	**	2338
60	59.089	0.246	2359.54	2339.87	5.21	-0.911	-19.67	**	2360
61	60.069	0.257	**2382.63**	2361.24	5.80	-0.931	-21.39	**	**2400**
62	61.074	0.279	2407.19	**2384.55**	6.71	-0.926	-22.64	**	2407
63	62.117	0.322	2433.30	2410.36	8.24	-0.883	-22.94	**	2433
64	63.220	0.405	2461.10	2439.55	11.13	-0.780	-21.55		2461
65	64.402	0.563	2490.89	2473.34	16.88	-0.598	-17.55		2491
66	65.650	0.818	2523.14	2512.85	27.76	-0.350	-10.29		2523
67	66.851	1.055	2558.74	2556.40	42.15	-0.149	-2.34		2559
68	67.940	1.173	2599.05	2602.11	54.16	-0.060	3.06		2599
69	68.990	1.200	2646.31	2654.52	64.65	-0.010	8.21		2646
70	70.085	1.133	2704.22	2722.64	74.88	0.085	18.42		2704
71	71.173	0.936	2779.77	2812.54	80.49	0.173	32.77		2780
72	72.146	0.569	2892.50	2916.69	63.75	0.146	24.19		2893
73	72.754	0.200	3026.78	2993.76	26.29	-0.246	-33.02		3027

Table 8

July 2006 Comparability Study Results for Exit Level Mathematics

Paper Test Raw Score	Equated Online Test Raw Score	Standard Deviation of Online Raw Scores	Paper Test Scale Score	Online Test Scale Score	Standard Deviation of Online Scale Scores	Difference in Raw Scores	Difference in Scale Scores	Significant Difference	Final Online Scale Score
0	0.320	0.006	1302.12	1347.78	0.846	0.320	45.66	**	1302
1	1.064	0.019	1444.76	1451.29	1.902	0.064	6.53	**	1451
2	2.121	0.035	1546.65	1554.06	2.122	0.121	7.41	**	1554
3	3.172	0.048	1607.95	1615.65	2.171	0.172	7.70	**	1616
4	4.219	0.061	1652.74	1660.56	2.170	0.219	7.82	**	1661
5	5.262	0.072	1688.50	1696.37	2.154	0.262	7.87	**	1696
6	6.302	0.081	1718.57	1726.47	2.129	0.302	7.90	**	1726
7	7.340	0.090	1744.71	1752.63	2.104	0.340	7.92	**	1753
8	8.376	0.099	1768.00	1775.89	2.069	0.376	7.89	**	1776
9	9.410	0.106	1789.00	1796.93	2.051	0.410	7.93	**	1797
10	10.443	0.113	1808.35	1816.31	2.030	0.443	7.96	**	1816
11	11.474	0.119	1826.33	1834.31	2.011	0.474	7.98	**	1834
12	12.503	0.125	1843.18	1851.19	1.996	0.503	8.01	**	1851
13	13.531	0.131	1859.10	1867.13	1.980	0.531	8.03	**	1867
14	14.558	0.136	1874.22	1882.28	1.967	0.558	8.06	**	1882
15	15.583	0.141	1888.67	1896.77	1.956	0.583	8.10	**	1897
16	16.607	0.145	1902.55	1910.68	1.946	0.607	8.13	**	1911
17	17.630	0.150	1915.93	1924.08	1.937	0.630	8.15	**	1924
18	18.651	0.153	1928.88	1937.06	1.931	0.651	8.18	**	1937
19	19.670	0.157	1941.46	1949.67	1.925	0.670	8.21	**	1950
20	20.688	0.160	1953.72	1961.95	1.920	0.688	8.23	**	1962
21	21.704	0.163	1965.69	1973.95	1.915	0.704	8.26	**	1974
22	22.719	0.166	1977.42	1985.70	1.912	0.719	8.28	**	1986
23	23.732	0.168	1988.94	1997.24	1.910	0.732	8.30	**	1997
24	24.743	0.171	2000.28	*2008.59*	1.908	0.743	8.31	**	*2015*
25	25.752	0.172	*2011.47*	2019.80	1.907	0.752	8.33	**	2020
26	26.760	0.174	2022.54	2030.87	1.905	0.760	8.33	**	2031
27	27.766	0.175	2033.50	2041.83	1.905	0.765	8.33	**	2042
28	28.770	0.176	2044.38	*2052.71*	1.904	0.770	8.33	**	*2058*
29	29.772	0.177	*2055.20*	2063.53	1.906	0.772	8.33	**	2064
30	30.772	0.177	2065.99	2074.31	1.908	0.772	8.32	**	2074
31	31.771	0.177	2076.77	2085.08	1.908	0.771	8.31	**	2085
32	32.767	0.177	2087.55	**2095.84**	1.910	0.767	8.29	**	**2100**
33	33.762	0.176	**2098.36**	2106.64	1.913	0.762	8.28	**	2107
34	34.755	0.175	2109.22	2117.48	1.915	0.755	8.26	**	2117
35	35.747	0.174	2120.15	2128.38	1.919	0.746	8.23	**	2128
36	36.736	0.172	2131.18	2139.39	1.921	0.736	8.21	**	2139
37	37.724	0.170	2142.33	2150.51	1.925	0.724	8.18	**	2151
38	38.710	0.168	2153.63	2161.78	1.929	0.710	8.15	**	2162
39	39.694	0.165	2165.11	2173.22	1.932	0.694	8.11	**	2173
40	40.677	0.162	2176.80	2184.88	1.939	0.676	8.08	**	2185
41	41.657	0.159	2188.75	2196.80	1.943	0.657	8.05	**	2197
42	42.636	0.155	2200.99	2209.00	1.949	0.636	8.01	**	2209
43	43.614	0.151	2213.57	2221.54	1.958	0.614	7.97	**	2222
44	44.590	0.146	2226.55	2234.48	1.964	0.590	7.93	**	2234
45	45.564	0.141	2239.99	2247.88	1.973	0.564	7.89	**	2248

46	46.537	0.136	2253.98	2261.83	1.983	0.537	7.85	**	2262
47	47.508	0.130	2268.61	2276.42	1.993	0.508	7.81	**	2276
48	48.478	0.123	2283.99	2291.77	2.006	0.477	7.78	**	2292
49	49.446	0.116	2300.28	2308.02	2.020	0.446	7.74	**	2308
50	50.412	0.109	2317.66	2325.43	2.051	0.412	7.77	**	2325
51	51.377	0.101	2336.51	2344.22	2.060	0.377	7.71	**	2344
52	52.341	0.092	2356.94	2364.64	2.084	0.341	7.70	**	2365
53	53.303	0.083	**2379.53**	**2387.24**	2.115	0.303	7.71	**	**2400**
54	54.264	0.073	2404.96	2412.70	2.153	0.264	7.74	**	2413
55	55.223	0.063	2434.29	2442.11	2.207	0.223	7.82	**	2442
56	56.181	0.052	2469.30	2477.29	2.290	0.181	7.99	**	2477
57	57.138	0.040	2513.33	2521.69	2.435	0.138	8.36	**	2522
58	58.093	0.028	2573.88	2583.30	2.790	0.093	9.42	**	2583
59	59.047	0.014	2674.81	2681.52	2.024	0.047	6.71	**	2682
60	59.714	0.004	2816.70	2776.17	0.621	-0.286	-40.53	**	2817

Table 9

July 2006 Comparability Study Results for Exit Level Science

Paper Test Raw Score	Equated Online Test Raw Score	Standard Deviation of Online Raw Scores	Paper Test Scale Score	Online Test Scale Score	Standard Deviation of Online Scale Scores	Difference in Raw Scores	Difference in Scale Scores	Significant Difference	Final Online Scale Score
0	0.312	0.004	1392.51	1433.11	0.57	0.312	40.60	**	1393
1	1.040	0.014	1522.46	1526.21	1.32	0.040	3.75	**	1522
2	2.077	0.027	1615.89	1620.22	1.52	0.077	4.33	**	1616
3	3.111	0.039	1672.11	1676.65	1.60	0.111	4.54	**	1672
4	4.142	0.050	1713.11	1717.74	1.63	0.142	4.63	**	1713
5	5.170	0.060	1745.79	1750.45	1.65	0.170	4.66	**	1746
6	6.196	0.069	1773.22	1777.89	1.65	0.196	4.67	**	1773
7	7.220	0.078	1797.05	1801.71	1.66	0.220	4.66	**	1797
8	8.242	0.086	1818.25	1822.89	1.66	0.242	4.64	**	1818
9	9.261	0.094	1837.46	1842.07	1.65	0.261	4.61	**	1837
10	10.279	0.101	1855.11	1859.69	1.65	0.279	4.58	**	1855
11	11.296	0.107	1871.51	1876.06	1.65	0.296	4.55	**	1872
12	12.310	0.113	1886.90	1891.41	1.64	0.310	4.51	**	1887
13	13.324	0.119	1901.44	1905.92	1.64	0.324	4.48	**	1901
14	14.336	0.124	1915.28	1919.72	1.64	0.336	4.44	**	1915
15	15.346	0.128	1928.52	1932.94	1.64	0.346	4.42	**	1929
16	16.356	0.133	1941.27	1945.65	1.63	0.356	4.38	**	1941
17	17.364	0.137	1953.58	1957.93	1.63	0.364	4.35	**	1954
18	18.371	0.140	1965.53	1969.85	1.63	0.371	4.32	**	1966
19	19.378	0.143	1977.16	1981.45	1.63	0.378	4.29	**	1977
20	20.383	0.146	1988.53	1992.81	1.63	0.383	4.28	**	1989
21	21.387	0.148	1999.71	2003.95	1.62	0.387	4.24	**	2000
22	22.391	0.150	2010.66	2014.88	1.62	0.391	4.22	**	2011
23	23.393	0.152	2021.46	*2025.66*	1.62	0.393	4.20	**	2021
24	24.395	0.153	*2032.14*	2036.32	1.62	0.395	4.18	**	*2035*
25	25.396	0.154	2042.73	2046.90	1.63	0.396	4.17	**	2043
26	26.396	0.155	2053.26	2057.42	1.63	0.396	4.16	**	2053
27	27.396	0.155	*2063.75*	*2067.89*	1.63	0.396	4.14	**	*2068*
28	28.395	0.155	2074.22	2078.36	1.63	0.395	4.14	**	2074
29	29.393	0.155	2084.71	2088.84	1.63	0.393	4.13	**	2085
30	30.390	0.154	**2095.23**	**2099.36**	1.63	0.390	4.13	**	**2100**
31	31.387	0.153	2105.81	2109.94	1.63	0.387	4.13	**	2106
32	32.383	0.151	2116.48	2120.62	1.64	0.383	4.14	**	2116
33	33.378	0.150	2127.29	2131.42	1.64	0.378	4.13	**	2127
34	34.373	0.147	2138.23	2142.38	1.64	0.373	4.15	**	2138
35	35.366	0.145	2149.36	2153.51	1.64	0.366	4.15	**	2149
36	36.359	0.142	2160.70	2164.87	1.65	0.359	4.17	**	2161
37	37.351	0.139	2172.31	2176.49	1.65	0.351	4.18	**	2172
38	38.343	0.135	2184.22	2188.43	1.66	0.343	4.21	**	2184
39	39.333	0.131	2196.50	2200.73	1.66	0.333	4.23	**	2197
40	40.323	0.126	2209.20	2213.46	1.67	0.323	4.26	**	2209
41	41.311	0.122	2222.40	2226.69	1.67	0.311	4.29	**	2222
42	42.299	0.116	2236.18	2240.51	1.68	0.298	4.33	**	2236
43	43.285	0.111	2250.67	2255.03	1.69	0.285	4.36	**	2251
44	44.270	0.104	2265.98	2270.39	1.70	0.270	4.41	**	2266
45	45.254	0.098	2282.32	2286.78	1.72	0.254	4.46	**	2282
46	46.237	0.091	2299.89	2304.41	1.73	0.236	4.52	**	2300
47	47.218	0.083	2319.01	2323.60	1.75	0.218	4.59	**	2319
48	48.197	0.075	2340.12	2344.80	1.77	0.197	4.68	**	2340

49	49.175	0.066	2363.84	2368.63	1.81	0.175	4.79	**	2364
50	50.151	0.057	**2391.17**	**2396.10**	1.85	0.151	4.93	**	**2400**
51	51.126	0.047	2423.73	2428.86	1.91	0.126	5.13	**	2424
52	52.098	0.036	2464.60	2470.08	2.04	0.098	5.48	**	2465
53	53.068	0.025	2520.68	2526.99	2.33	0.068	6.31	**	2521
54	54.035	0.013	2613.97	2618.53	1.68	0.035	4.56	**	2614
55	54.711	0.004	2743.78	2706.24	0.52	-0.289	-37.54	**	2744

Table 10

July 2006 Comparability Study Results for Exit Level Social Studies

Paper Test Raw Score	Equated Online Test Raw Score	Standard Deviation of Online Raw Scores	Paper Test Scale Score	Online Test Scale Score	Standard Deviation of Online Scale Scores	Difference in Raw Scores	Difference in Scale Scores	Significant Difference	Final Online Scale Score
0	0.332	0.012	1421.08	1463.23	1.47	0.332	42.15	**	1421
1	1.101	0.036	1547.98	1557.25	3.34	0.101	9.27	**	1557
2	2.187	0.068	1639.69	1650.02	3.74	0.187	10.33	**	1650
3	3.260	0.095	1695.06	1705.58	3.85	0.260	10.52	**	1706
4	4.323	0.119	1735.56	1746.02	3.86	0.323	10.46	**	1746
5	5.379	0.141	1767.94	1778.26	3.85	0.379	10.32	**	1778
6	6.428	0.161	1795.19	1805.34	3.83	0.428	10.15	**	1805
7	7.472	0.180	1818.93	1828.91	3.80	0.472	9.98	**	1829
8	8.511	0.197	1840.10	1849.92	3.77	0.511	9.82	**	1850
9	9.547	0.212	1859.33	1869.01	3.75	0.547	9.68	**	1869
10	10.579	0.227	1877.04	1886.58	3.72	0.579	9.54	**	1887
11	11.609	0.240	1893.53	1902.96	3.70	0.609	9.43	**	1903
12	12.636	0.252	1909.03	1918.37	3.68	0.636	9.34	**	1918
13	13.661	0.263	1923.72	1932.96	3.66	0.661	9.24	**	1933
14	14.684	0.274	1937.71	1946.88	3.65	0.684	9.17	**	1947
15	15.706	0.283	1951.13	1960.25	3.64	0.706	9.12	**	1960
16	16.725	0.291	1964.06	1973.15	3.63	0.725	9.09	**	1973
17	17.743	0.299	1976.61	1985.62	3.60	0.743	9.01	**	1986
18	18.760	0.305	1988.75	1997.74	3.60	0.760	8.99	**	1998
19	19.775	0.311	2000.59	2009.57	3.59	0.775	8.98	**	2010
20	20.788	0.316	2012.19	2021.15	3.58	0.788	8.96	**	2021
21	21.800	0.320	*2023.57*	*2032.52*	3.57	0.800	8.95	**	*2033*
22	22.810	0.323	2034.77	2043.72	3.56	0.810	8.95	**	2044
23	23.819	0.326	2045.83	2054.77	3.55	0.819	8.94	**	2055
24	24.826	0.327	*2056.76*	*2065.70*	3.54	0.826	8.94	**	*2067*
25	25.832	0.328	2067.59	2076.55	3.53	0.832	8.96	**	2077
26	26.836	0.328	2078.37	2087.34	3.52	0.836	8.97	**	2087
27	27.838	0.328	2089.11	**2098.09**	3.51	0.838	8.98	**	**2100**
28	28.839	0.326	**2099.83**	2108.83	3.51	0.839	9.00	**	2109
29	29.838	0.324	2110.56	2119.58	3.50	0.837	9.02	**	2120
30	30.835	0.322	2121.32	2130.36	3.49	0.834	9.04	**	2130
31	31.830	0.318	2132.15	2141.21	3.48	0.830	9.06	**	2141
32	32.823	0.314	2143.06	2152.14	3.48	0.823	9.08	**	2152
33	33.814	0.309	2154.09	2163.19	3.47	0.814	9.10	**	2163
34	34.803	0.304	2165.25	2174.38	3.46	0.803	9.13	**	2174
35	35.790	0.298	2176.60	2185.74	3.46	0.790	9.14	**	2186
36	36.775	0.291	2188.15	2197.32	3.45	0.775	9.17	**	2197
37	37.758	0.283	2199.96	2209.14	3.45	0.758	9.18	**	2209
38	38.738	0.275	2212.06	2221.26	3.45	0.738	9.20	**	2221
39	39.716	0.266	2224.51	2233.73	3.45	0.716	9.22	**	2234
40	40.692	0.257	2237.37	2246.61	3.45	0.692	9.24	**	2247
41	41.665	0.246	2250.72	2259.97	3.45	0.665	9.25	**	2260
42	42.635	0.235	2264.63	2273.90	3.45	0.635	9.27	**	2274
43	43.603	0.224	2279.22	2288.51	3.46	0.603	9.29	**	2289
44	44.568	0.211	2294.63	2303.94	3.47	0.568	9.31	**	2304
45	45.530	0.198	2311.01	2320.34	3.48	0.530	9.33	**	2320
46	46.490	0.184	2328.60	2337.96	3.51	0.490	9.36	**	2338
47	47.447	0.169	2347.70	2357.09	3.54	0.447	9.39	**	2357

48	48.401	0.152	2368.72	**2378.17**	3.60	0.401	9.45	**	**2400**
49	49.352	0.135	**2392.30**	2401.83	3.66	0.352	9.53	**	2402
50	50.300	0.117	2419.38	2429.04	3.76	0.300	9.66	**	2429
51	51.246	0.097	2451.56	2461.46	3.91	0.246	9.90	**	2461
52	52.188	0.076	2491.85	2502.27	4.19	0.188	10.42	**	2502
53	53.128	0.053	2547.16	2558.89	4.81	0.128	11.73	**	2559
54	54.065	0.028	2638.67	2647.06	3.52	0.065	8.39	**	2647
55	54.720	0.009	2766.92	2730.99	1.09	-0.280	-35.93	**	2767