

2010 Grade 8 Mathematics Item Analysis- Multiple Choice Items

MATH Question 1

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	124	.1	.1	.1
*	19	.0	.0	.1
1	2231	1.0	1.0	1.1
3	13056	5.8	5.8	6.9
4	3584	1.6	1.6	8.5
B	205855	91.5	91.5	100.0
Total	224869	100.0	100.0	

MATH Question 2

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	120	.1	.1	.1
*	67	.0	.0	.1
1	11798	5.2	5.2	5.3
2	11136	5.0	5.0	10.3
3	13155	5.9	5.9	16.1
D	188593	83.9	83.9	100.0
Total	224869	100.0	100.0	

MATH Question 3

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	144	.1	.1	.1
*	36	.0	.0	.1
1	29257	13.0	13.0	13.1
3	10668	4.7	4.7	17.8
4	8540	3.8	3.8	21.6
B	176224	78.4	78.4	100.0
Total	224869	100.0	100.0	

MATH Question 4

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	209	.1	.1	.1
*	52	.0	.0	.1
1	10517	4.7	4.7	4.8
3	10245	4.6	4.6	9.3
4	10344	4.6	4.6	13.9
B	193502	86.1	86.1	100.0
Total	224869	100.0	100.0	

MATH Question 5

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	129	.1	.1	.1
*	49	.0	.0	.1
1	9398	4.2	4.2	4.3
2	11037	4.9	4.9	9.2
3	23446	10.4	10.4	19.6
D	180810	80.4	80.4	100.0
Total	224869	100.0	100.0	

MATH Question 6

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	161	.1	.1	.1
*	36	.0	.0	.1
1	16345	7.3	7.3	7.4
2	7883	3.5	3.5	10.9
3	13473	6.0	6.0	16.9
D	186971	83.1	83.1	100.0
Total	224869	100.0	100.0	

MATH Question 7

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	136	.1	.1	.1
*	39	.0	.0	.1
2	17545	7.8	7.8	7.9
3	28632	12.7	12.7	20.6
4	2955	1.3	1.3	21.9
A	175562	78.1	78.1	100.0
Total	224869	100.0	100.0	

MATH Question 8

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	403	.2	.2	.2
*	55	.0	.0	.2
1	20021	8.9	8.9	9.1
3	31633	14.1	14.1	23.2
4	17925	8.0	8.0	31.1
B	154832	68.9	68.9	100.0
Total	224869	100.0	100.0	

MATH Question 9

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	352	.2	.2	.2
*	46	.0	.0	.2
2	26851	11.9	11.9	12.1
3	30170	13.4	13.4	25.5
4	18451	8.2	8.2	33.7
A	148999	66.3	66.3	100.0
Total	224869	100.0	100.0	

MATH Question 10

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	282	.1	.1	.1
*	47	.0	.0	.1
1	16521	7.3	7.3	7.5
3	28919	12.9	12.9	20.4
4	41636	18.5	18.5	38.9
B	137464	61.1	61.1	100.0
Total	224869	100.0	100.0	

MATH Question 11

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	152	.1	.1	.1
*	49	.0	.0	.1
1	12129	5.4	5.4	5.5
2	8906	4.0	4.0	9.4
3	10647	4.7	4.7	14.2
D	192986	85.8	85.8	100.0
Total	224869	100.0	100.0	

MATH Question 12

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	150	.1	.1	.1
*	39	.0	.0	.1
1	26398	11.7	11.7	11.8
2	7987	3.6	3.6	15.4
3	17473	7.8	7.8	23.1
D	172822	76.9	76.9	100.0
Total	224869	100.0	100.0	

MATH Question 13

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	299	.1	.1	.1
*	50	.0	.0	.2
1	11830	5.3	5.3	5.4
3	44553	19.8	19.8	25.2
4	7746	3.4	3.4	28.7
B	160391	71.3	71.3	100.0
Total	224869	100.0	100.0	

MATH Question 14

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	202	.1	.1	.1
*	41	.0	.0	.1
1	19410	8.6	8.6	8.7
3	29848	13.3	13.3	22.0
4	20455	9.1	9.1	31.1
B	154913	68.9	68.9	100.0
Total	224869	100.0	100.0	

MATH Question 15

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	251	.1	.1	.1
*	48	.0	.0	.1
1	13645	6.1	6.1	6.2
2	15054	6.7	6.7	12.9
4	9808	4.4	4.4	17.3
C	186063	82.7	82.7	100.0
Total	224869	100.0	100.0	

MATH Question 16

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	260	.1	.1	.1
*	40	.0	.0	.1
1	12670	5.6	5.6	5.8
2	59059	26.3	26.3	32.0
3	9755	4.3	4.3	36.4
D	143085	63.6	63.6	100.0
Total	224869	100.0	100.0	

MATH Question 17

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	223	.1	.1	.1
*	56	.0	.0	.1
2	21472	9.5	9.5	9.7
3	9060	4.0	4.0	13.7
4	24072	10.7	10.7	24.4
A	169986	75.6	75.6	100.0
Total	224869	100.0	100.0	

MATH Question 18

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	176	.1	.1	.1
*	30	.0	.0	.1
1	3962	1.8	1.8	1.9
2	6054	2.7	2.7	4.5
4	9159	4.1	4.1	8.6
C	205488	91.4	91.4	100.0
Total	224869	100.0	100.0	

MATH Question 19

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	290	.1	.1	.1
*	42	.0	.0	.1
1	13636	6.1	6.1	6.2
2	8533	3.8	3.8	10.0
3	15070	6.7	6.7	16.7
D	187298	83.3	83.3	100.0
Total	224869	100.0	100.0	

MATH Question 20

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	166	.1	.1	.1
*	37	.0	.0	.1
1	30023	13.4	13.4	13.4
2	8895	4.0	4.0	17.4
4	4261	1.9	1.9	19.3
C	181487	80.7	80.7	100.0
Total	224869	100.0	100.0	

MATH Question 21

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	261	.1	.1	.1
*	71	.0	.0	.1
1	18041	8.0	8.0	8.2
2	50790	22.6	22.6	30.8
3	15481	6.9	6.9	37.6
D	140225	62.4	62.4	100.0
Total	224869	100.0	100.0	

MATH Question 22

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	398	.2	.2	.2
*	53	.0	.0	.2
1	24133	10.7	10.7	10.9
3	9122	4.1	4.1	15.0
4	34444	15.3	15.3	30.3
B	156719	69.7	69.7	100.0
Total	224869	100.0	100.0	

MATH Question 23

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	206	.1	.1	.1
*	35	.0	.0	.1
1	2298	1.0	1.0	1.1
2	3936	1.8	1.8	2.9
4	2403	1.1	1.1	3.9
C	215991	96.1	96.1	100.0
Total	224869	100.0	100.0	

MATH Question 24

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	327	.1	.1	.1
*	54	.0	.0	.2
1	19282	8.6	8.6	8.7
2	29834	13.3	13.3	22.0
3	44800	19.9	19.9	41.9
D	130572	58.1	58.1	100.0
Total	224869	100.0	100.0	

MATH Question 25

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	234	.1	.1	.1
*	56	.0	.0	.1
1	25121	11.2	11.2	11.3
2	5019	2.2	2.2	13.5
3	8705	3.9	3.9	17.4
D	185734	82.6	82.6	100.0
Total	224869	100.0	100.0	

MATH Question 26

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	348	.2	.2	.2
*	42	.0	.0	.2
2	14989	6.7	6.7	6.8
3	13575	6.0	6.0	12.9
4	12854	5.7	5.7	18.6
A	183061	81.4	81.4	100.0
Total	224869	100.0	100.0	

MATH Question 27

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	491	.2	.2	.2
*	42	.0	.0	.2
1	19773	8.8	8.8	9.0
3	18860	8.4	8.4	17.4
4	9724	4.3	4.3	21.7
B	175979	78.3	78.3	100.0
Total	224869	100.0	100.0	

2010 Grade 8 Mathematics Item Analysis- Constructed Response Items

Descriptive Statistics

	N	Mean		Std.
	Statistic	Statistic	Std. Error	Statistic
MATH Q28 Score Value	223856	1.3968	.00168	.79365
MATH Q29 Score Value	223944	1.4425	.00130	.61666
MATH Q30 Score Value	223709	1.5161	.00154	.72930
MATH Q31 Score Value	223876	1.3855	.00144	.68331
MATH Q32 Score Value	222926	2.0969	.00238	1.12255
MATH Q33 Score Value	223889	2.0370	.00229	1.08299
Math Q34 Score Value	223349	1.3612	.00179	.84630
Math Q35 Score Value	223776	1.2115	.00197	.93092
Math Q36 Score Value	223955	1.1496	.00158	.74587
Math Q37 Score Value	222142	1.1187	.00186	.87716
Math Q38 Score Value	223340	1.1688	.00152	.71928
Math Q39 Score Value	223978	1.2693	.00177	.83949
Math Q40 Score Value	219805	1.0713	.00195	.91564
Math Q41 Score Value	220903	1.1760	.00190	.89352
Math Q42 Score Value	223540	2.2582	.00213	1.00638
Math Q43 Score Value	223340	1.5564	.00269	1.27354
Math Q44 Score Value	223077	2.2369	.00224	1.05625
Math Q45 Score Value	223220	1.9937	.00215	1.01738
Valid N (listwise)	212260			

2010 Grade 8 Mathematics Item Analysis- SPI Items

Descriptive Statistics

	N	Mean		Std.
	Statistic	Statistic	Std. Error	Statistic
MATH Standard 1 Performance Index	224863	66.54	.048	22.923
MATH Standard 2 Performance Index	224863	70.04	.051	24.411
MATH Standard 3 Performance Index	224863	68.61	.051	23.972
MATH Standard 4 Performance Index	224863	74.40	.045	21.290
MATH Standard 5 Performance Index	0			
Valid N (listwise)	0			