

Grade Seven Numeracy: An Item-level Analysis - Multiple Choice (Provincial Level)

British Columbia

All Schools

FSA May/2005

FSA population (N=51,221)

Provincial FSA Item-Level Response Reports include data for all BC students in Grade 7 who wrote a particular FSA test. Both public and independent schools are included. The FSA 2004 provincial Item-Level Response Reports display the proportion of students who made errors on each test item and a description of the misconception.

Since the English and French versions of the FSA Numeracy tests are identical, the Item-level Analysis – Multiple Choice provincial report includes all students.

Content Area	Item #	Number of Students who Responded to the Item	Percentage of Students who Answered Incorrectly	Specific Curricular Aspect that Needs Attention [$>20\%$ selected incorrect response]
Number	1	46715	19	N/A
Number	2	46032	34	*
Number	3	46524	36	<ul style="list-style-type: none"> Students just added the numbers in the stem of a problem involving percent.
Number	4	46198	44	<ul style="list-style-type: none"> Students added two different discount rates together and used this rate to find the discount of two differently priced items.
Number	8	45561	47	<ul style="list-style-type: none"> Students did not know how to use the least common multiple of three events with different durations to find a common time.
Number	9	46415	33	<ul style="list-style-type: none"> Students found the wrong percent of a number.
Number	12	46184	53	<ul style="list-style-type: none"> Students made a calculation error when

				finding the mean of a set of integers.
Number	13	45893	55	<ul style="list-style-type: none"> Students weren't able to estimate a fraction to represent a part of a whole.
Number	20	44885	25	*
Number	25	46169	55	<ul style="list-style-type: none"> In a 2-step money problem involving ticket sales, students completed the first step only and did not correctly determine the number of ticket sales needed to raise a given amount of money.
Number	28	46191	45	<ul style="list-style-type: none"> Students weren't able to determine a fraction to represent a part of a whole.
Number	29	46044	48	*
Number	30	46282	26	*
Number	31	45721	48	<ul style="list-style-type: none"> Students ignored relevant information in the cost-calculating problem and calculated the total amount of money spent instead of a profit
Number	32	46195	47	<ul style="list-style-type: none"> Students found the amount of a reduction in a percent problem rather than the net price after a reduction.
Number	33	46152	43	<ul style="list-style-type: none"> Students used the wrong number operation in attempting to find the percent of a number, and likely subtracted the two numbers in the stem.
Number	35	46035	34	*
Number	36	45571	51	<ul style="list-style-type: none"> Students used poor estimation strategies for

				solving a percentage problem
Number	39	45565	51	<ul style="list-style-type: none"> Students calculated the missing term in a ratio but misread the question which asked for the total of two terms.
Patterns and Relations	5	46485	35	*
Patterns and Relations	10	46294	39	*
Patterns and Relations	11	46262	53	<ul style="list-style-type: none"> Students weren't able to find a common time in cycles involving two different time periods.
Patterns and Relations	14	45993	41	<ul style="list-style-type: none"> Students weren't able to find the number of objects in the nth arrangement of a set of objects arranged in a pattern
Patterns and Relations	16	45570	51	<ul style="list-style-type: none"> Students were unable to determine at which point a flat rate (season's pass) became a better deal than a pay per use situation.
Patterns and Relations	24	46138	45	<ul style="list-style-type: none"> Students weren't able to determine a pattern from an arrangement of objects and then find the sum of all objects for the first n terms.
Patterns and Relations	34	45785	48	<ul style="list-style-type: none"> Students likely used the incorrect operation when using trial substitution in a money problem.
Patterns and Relations	38	45851	41	*
Patterns and Relations	40	45731	70	<ul style="list-style-type: none"> Students found the nth term in a series of numbers rather than the sum of n terms.
Shape and Space	7	46184	43	*
Shape and Space	15	45356	54	<ul style="list-style-type: none"> Students were not able to determine an end

				time when given a start time, a rate of travel for a given distance and a rest interval.
Shape and Space	17	45429	41	<ul style="list-style-type: none"> In a 2-step problem involving addition and subtraction of numbers with different metric units, students completed only the first step by adding 3 numbers with different metric units.
Shape and Space	19	44992	44	*
Shape and Space	22	46425	26	*
Shape and Space	23	46234	21	*
Shape and Space	26	45879	56	<ul style="list-style-type: none"> Students made an error in comparing unit costs of items.
Shape and Space	27	46210	60	<ul style="list-style-type: none"> Students weren't able to determine the finish time in a multi-step problem involving a start time and several time intervals.
Statistics and Probability	6	46710	39	*
Statistics and Probability	18	45389	34	*
Statistics and Probability	37	45871	50	<ul style="list-style-type: none"> Students likely reduced the fraction answer incorrectly in a simple probability question.
Statistics and Probability	41	45586	19	N/A

Note: 'N/A' represents that there were fewer than 20% of the students who incorrectly answered the item; '*' represents that there was no specific curricular aspect that needed attention since each of the incorrect answers has been chosen by less than 20% of the students.