

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

British Columbia

All Schools

FSA May/2007

FSA population (N=43,527)

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 2007 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	43485	18	N/A
Number	2	43214	38	*
Number	4	43261	43	*
Number	5	42854	36	*
Number	6	43179	53	<ul style="list-style-type: none"> Students made a calculation error when finding the mean of a set of integers.
Number	9	42647	50	<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	12	42990	55	<ul style="list-style-type: none"> In a question involving three different number patterns, students were unable to find the first time that the three patterns shared a common number.
Number	13	42792	54	<ul style="list-style-type: none"> Students were not able to estimate a fraction to represent a part of a whole.

Number	18	42041	58	<ul style="list-style-type: none"> Students made a calculation error in a two-step word problem involving rate of speed and start and finish times.
Number	22	43418	40	*
Number	23	43237	35	*
Number	24	43406	53	<ul style="list-style-type: none"> Students were unable to find the best buy in a question that involved unit pricing.
Number	29	43296	32	*
Number	31	43116	46	<ul style="list-style-type: none"> Students were not able to determine a fraction to represent a part of a whole.
Number	34	43119	52	<ul style="list-style-type: none"> Students did not understand a number pattern question involving price increase and multiplied the initial price by the number of times the increase was to be applied. Students were not able to solve a number problem involving a percent increase for several successive intervals.
Number	35	43053	43	*
Number	36	42885	53	<ul style="list-style-type: none"> In a question involving fractions as parts of a whole, students either incorrectly summed the fractions and/or else didn't realize they couldn't sum to a number greater than 1.
Number	39	42718	50	*
Number	40	42972	34	*
Patterns and Relations	10	43197	36	*
Patterns and Relations	16	42619	46	<ul style="list-style-type: none"> Students were not able to find the number of objects in the nth arrangement of a set of

				objects arranged in a pattern
Patterns and Relations	19	42000	52	*
Patterns and Relations	26	43077	62	<ul style="list-style-type: none"> In a question involving two different objects arranged in a pattern, students were unable to find the number of one of the objects, given the number of the other.
Shape and Space	3	42687	72	<ul style="list-style-type: none"> In a division and subtraction question involving centimetres and metres, students were unable to convert metric units or to perform the operations. In a division and subtraction question involving centimetres and metres, students incorrectly divided different units and then answered only part of the question.
Shape and Space	8	43244	36	*
Shape and Space	11	43093	39	*
Shape and Space	14	42754	45	*
Shape and Space	17	42664	55	<ul style="list-style-type: none"> In a question involving duration of time in hours and minutes, with a starting time in the morning and a finish time in the afternoon, students determined the number of minutes correctly but not the number of hours.
Shape and Space	20	41906	32	*
Shape and Space	25	43453	22	*
Shape and Space	27	43192	56	<ul style="list-style-type: none"> Students completed the first step in a two-step problem involving mass but did not complete the second step
Shape and Space	28	42924	57	<ul style="list-style-type: none"> Students were unable to find the dimensions

				of a container that related cubic centimetres (dry volume) to litres (liquid volume).
Shape and Space	30	43095	89	<ul style="list-style-type: none"> Students made an error in comparing unit costs of items.
Shape and Space	32	43173	33	*
Shape and Space	33	43277	60	<ul style="list-style-type: none"> Students were not able to determine the finish time in a multi-step problem involving a start time and several time intervals.
Shape and Space	38	43055	43	*
Statistics and Probability	7	43433	40	*
Statistics and Probability	15	42740	41	<ul style="list-style-type: none"> Students were unable to interpret a line graph with the axes labeled but with no units.
Statistics and Probability	37	43113	51	*
Statistics and Probability	41	42822	43	<ul style="list-style-type: none"> Students were unable to identify the amount represented by a sector in a circle graph.

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.