Ohio Achievement Assessment

Grade 7 Mathematics

Spring 2011

Answer Key
and
Scoring Guidelines

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Item No.	Type	Content Standard	Content Standard Benchmark	Key
1	Multiple Choice	Geometry and Spatial Sense	J	A
2	Multiple Choice	Measurement	A	Not for public release
3	Multiple Choice	Patterns, Functions, and Algebra	B	D
4	Multiple Choice	Number, Number Sense and Operations	H	Not for public release
5	Multiple Choice	Data Analysis and Probability	B	Not for public release
6	Short Answer	Geometry and Spatial Sense	F	Not for public release
7	Multiple Choice	Patterns, Functions, and Algebra	L	A
8	Multiple Choice	Number, Number Sense and Operations	I	Not for public release
9	Multiple Choice	Measurement	B	C
10	Multiple Choice	Patterns, Functions, and Algebra	H	B
11	Short Answer	Number, Number Sense and Operations	I	Not for public release
12-17	**Field Test questions not used for student score**			
18	Multiple Choice	Geometry and Spatial Sense	E	A
19	Multiple Choice	Data Analysis and Probability	J	B
20	Multiple Choice	Patterns, Functions, and Algebra	E	Not for public release
21	Extended Response	Measurement	C	Not for public release
22	Multiple Choice	Number, Number Sense and Operations	H	C
23	Multiple Choice	Geometry and Spatial Sense	F	C
24	Multiple Choice	Patterns, Functions, and Algebra	K	A
25	Multiple Choice	Measurement	E	Not for public release
26	Short Answer	Geometry and Spatial Sense	D	Not for public release
27	Multiple Choice	Number, Number Sense and Operations	I	Not for public release
28	Multiple Choice	Patterns, Functions, and Algebra	A	Not for public release
29	Multiple Choice	Measurement	E	D
30	Multiple Choice	Geometry and Spatial Sense	H	D
31	Extended Response	Data Analysis and Probability	E	Not for public release
32	Multiple Choice	Number, Number Sense and Operations	I	Not for public release
33	Multiple Choice	Measurement	C	Not for public release
34	Multiple Choice	Geometry and Spatial Sense	J	Not for public release
35	Multiple Choice	Data Analysis and Probability	I	Not for public release
36	Short Answer	Patterns, Functions, and Algebra	C	2 pt rubric
37	Multiple Choice	Number, Number Sense and Operations	E	Not for public release
38	Multiple Choice	Measurement	G	Not for public release
39	Multiple Choice	Patterns, Functions, and Algebra	D	Not for public release
40	Multiple Choice	Data Analysis and Probability	G	C
41	Short Answer	Number, Number Sense and Operations	I	2 pt rubric
42	Multiple Choice	Patterns, Functions, and Algebra	B	Not for public release
43	Multiple Choice	Data Analysis and Probability	H	C
44	Multiple Choice	Geometry and Spatial Sense	D	Not for public release
45	Multiple Choice	Patterns, Functions, and Algebra	F	Not for public release

Limited = 0-9; Basic = 10-16; Proficient = 17-29; Accelerated = 30-36; Advanced = 37-50
Multiple Choice = 1 point; Short Answer = 2 points; Extended Response = 4 points

36. Jen is paddling a canoe from one side of a lake to the other. She is paddling at a rate of 35 yards per minute.

In your **Answer Document** write an equation to find *y*, the number of yards she paddles in *x* minutes.

Use your equation to determine how long it will take her to paddle the 840 yards from one side of the lake to the other. (**2 points**)

Scoring Guidelines

Points	Student Response
2 point	**Sample Response:** • $35x=y$ tells you how many yards (*y*) Jen will have gone in *x* minutes. When $y=840$, $35x=840$, so $x=24$. It will take her 24 minutes to get across the lake. • y = 35x, 24 minutes The focus of this task is using a variable as a placeholder for an unknown quantity in an equation. The response provides an equation for solving the problem and a solution for the equation.
1 point	The response shows partial evidence of using a variable as a placeholder for an unknown quantity in an equation; however, the solution may be incomplete or slightly flawed. **Sample Response:** • provide a correct equation but fail to provide a solution. • provide a correct equation and a solution but contain a minor calculation error. • state "24 minutes" with no equation or supporting work. • Show only 35*x*=840, *x*=24.
0 point	The response provides inadequate evidence of using a variable as a placeholder for an unknown quantity in an equation. The response provides major flaws in explanations or irrelevant information. **Sample Response:** • show x = 35y, x = 35.840, or x = 2. • provide only an incorrect equation. • restate the information provided in the item. • be blank or give irrelevant information.

41. Three towns in South Lake County voted on building a new soccer complex. The table below shows the number of people that voted in each town and the voting results.

Find the total number of Yes votes in South Lake County. In your **Answer Document** show work or provide an explanation to support your answer. (**2 points**)

Scoring Guidelines

Points	Student Response
2 point	**Sample Response:** • 49,000 yes votes $20{,}000 \times \frac{3}{4} = 15{,}000$ $30{,}000 \times 0.80 = 24{,}000$ $15{,}000 \times \frac{2}{3} = 10{,}000$ $15{,}000 + 24{,}000 + 10{,}000 = 49{,}000$ • 20,000 × 0.75 = 15,000 30,000 × 0.80 = 24,000 15,000 × $0.\overline{6}$ = 10,000 15,000 + 24,000 + 10,000 = 49,000 **NOTE**: response may fall in the range between 48,900 and 49,050, due to using 0.66 or 0.67 for $\frac{2}{3}$. The focus of the task is solving problems using the appropriate form of a rational number. The response demonstrates an adequate understanding of operating with fractions, ratios and percents. It indicates that the total number of yes votes. The response shows work or provides an explanation to support the answer.
1 point	The response provides partial evidence of solving problems using the appropriate form of a rational number; however, the solution is incomplete or slightly flawed. **Sample Response:** • Make an error in calculating the number of yes votes, but shows work or includes an explanation. • Interpret 80% incorrectly as multiplying by 8 so finds votes from Hot Springs = 8(30,000) = 240,000, but calculates other votes correctly. Provide a correct answer, but doesn't include an explanation or show work.
0 point	The response provides inadequate evidence of solving problems using the appropriate form of a rational number. The response provides major flaws in reasoning or irrelevant information. **Sample Response:** • Add the number of voters without finding the number of "yes" votes. 20,000 + 30,000 + 15,000 = 65,000 • Be blank or make unrelated statements. • Recopy information from the stem.