Illinois MATH Assessment

Practice Item Answer Key

Grade 5 – Online, Text-to-Speech

The following pages include the answer key for all machine-scored items, followed by a sample response for the hand-scored item.

- The rubrics show sample student responses. Student responses other than that shown in the rubric may earn full or partial credit.
- Which responses to hand-scored items receive full or partial credit will be confirmed during range-finding (reviewing sets of real student work)
- If students make a computation error, they can still earn points for reasoning or modeling.

Item Number	Answer Key
1.	**Student response is Square and Rhombus in row 1, Square and Rhombus in row 2, and Square in row 3**
2.	**DD1: 170** **DD2: 0.17**
3.	**Student response is 26.68**
4.	**See Rubric**
5.	**See Rubric**
6.	**Student response is 39.**
7.	**A**
8.	**See Rubric**
9.	**See Rubric**
10.	**Part A: B** **Part B: DD1 – is not, DD2 – subtracts the numbers of cups she used from, DD3 – less than**
11.	**A**
12.	**Student response is 6 (7/8)**
13.	**See Rubric**
14.	**Part A: Student response is 1(1/2).** **Part B: Student response is (1/4)**

15.	**B,D,E**
16.	**C**
17.	**Part A: 36.26** **Part B: 8.54**

Rubrics

#4 Rubric

Analytic Rubric Part A	
Score	**Description**
3	Student response includes each of the following 3 elements: • **Modeling component** = 1 point: Valid equation, using both multiplication and addition, to represent the total number of seats in both levels • **Computation component** = 1 point: Correct total number of seats in both levels, 610 • **Modeling component** = 1 point: Valid work or explanation to find the total number of seats in both levels Sample student response: $20 \times 17 + 18 \times 15 = 610$ The total number of seats is 610. The number of seats in Upper Level: 20 x 17 = 340. The number of seats in Lower Level: 18 x 15 = 270. Total number of seats: 340 + 270 = 610. Or other valid response. **Note**: A variable or symbol may be used in place of the answer in the equation.
2	Student response includes 2 of the 3 elements.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

Holistic Rubric Part B	
Score	**Description**
3	Student response includes the following 2 elements:

	• **Modeling component** = 1 point: Valid equation or equations, to represent the difference in the total seats in each of setup 1 and setup 2. • **Computation component** = 1 point: Correct difference in number of floor seats, 140 • **Modeling component** = 2 points: Valid work or explanation to find the difference in the number of seats between Set-up 1 and Set-up 2 Student response is completely correct and shows thorough understanding. Sample Student Response: (280+280+350+56)-(238+238+350) = 140 There are 140 more floor seats in Setup 1 than in Setup 2. The number of floor seats for all the sections in Set-up 1: 280 + 280 + 350 + 56 = 966. The number of floor seats for all the sections in Set-up 2: 238 + 238 + 350 = 826. I subtracted to find how many more floor seats there are in Set-up 1 than in Set-up 2: 966 – 826 = 140. Or other valid response.
2	Student response includes 2 of the 3 elements.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

ILLINOIS Assessment of Readiness

#5 Rubric

Analytic Rubric	
Score	**Description**
3	Student response includes each of the following 3 elements: • Modeling component = 1 point: Valid equation or equations shown to determine the length of the scarf. • Modeling component = 1 point: Valid equation or equations shown to determine the additional number of inches of the pattern needed. • Computation component = 1 point: Correct number of additional inches of the pattern needed, $10\frac{5}{8}$. Sample Student Response: Add to find the length of each repeating pattern of blue, green, and gray stripes. $$\frac{3}{4} + 1\frac{1}{8} + \frac{1}{2} = \frac{6}{8} + \frac{9}{8} + \frac{4}{8} = \frac{19}{8}$$ Multiply to find the total length of 25 repeating patterns. $$25 \times \frac{19}{8} = \frac{475}{8} = 59\frac{3}{8}$$ The scarf is $59\frac{3}{8}$ inches long, so it is not long enough. Subtract to find the additional length needed. $$70 - 59\frac{3}{8} = 69\frac{8}{8} - 59\frac{3}{8} = 10\frac{5}{8}$$ To complete the scarf, $10\frac{5}{8}$ more inches need to be knitted. Or other valid response.
2	Student response includes 2 of the 3 elements.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

#8 Rubric

Part A: Rubric	
Score	**Description**
1	Student response is $\frac{15}{12}$. Note: Equivalent numbers are acceptable.
0	The response is incorrect or irrelevant.

Part B: Answer Rationales	
A	Divided 4 by 11 rather than dividing 11 by 4.
B	Simplified the quotient incorrectly.
C	Correct. Divided 11 by 4 to get $\frac{11}{4}$ or $2\frac{3}{4}$.
D	Used the divisor as one of the bounds.

#9 Rubric

Part A: Rubric	
Score	**Description**
1	Student response is $\frac{15}{12}$. Note: Equivalent numbers are acceptable.
0	The response is incorrect or irrelevant.

Part B: Answer Rationales	
A	Divided 4 by 11 rather than dividing 11 by 4.
B	Simplified the quotient incorrectly.
C	Correct. Divided 11 by 4 to get $\frac{11}{4}$ or $2\frac{3}{4}$.
D	Used the divisor as one of the bounds.

#13 Rubric

Holistic Rubric	
Score	**Description**

3	Student response includes the following elements:
	
	• **Reasoning component** = 2 points:
	  ○ Valid equation represented by the model
	  ○ Valid explanation for how to use the model to solve the equation
	• **Computation component** = 1 point: Correct solution to the equation, 7.68
	
	Student response is completely correct and shows thorough understanding.
	
	Sample Student Response:
	
	The equation represented by the model is 3.2 x 2.4 = 7.68.
	The distance across the model shows the first factor because 3 + 0.2 = 3.2 and the distance down the model shows the second factor because 2 + 0.4 = 2.4.
	
	Each section of the model shows a partial product. The area model is used to find the product by adding the partial products, 6 + 1.2 + 0.4 + 0.08 = 7.68.
	
	Or other valid response.

2	Student response demonstrates both general achievement of the goals of the task and a less than thorough understanding.
1	Student response demonstrates both limited achievement of the goals of the task and a limited understanding.
0	Student response does not achieve any goals of the task or demonstrate any understanding.