

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 (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	<p>Student response includes each of the following 3 elements:</p> <ul style="list-style-type: none"> • 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 <p>Sample student response:</p> $20 \times 17 + 18 \times 15 = 610$ <p>The total number of seats is 610. The number of seats in Upper Level: $20 \times 17 = 340$. The number of seats in Lower Level: $18 \times 15 = 270$. Total number of seats: $340 + 270 = 610$.</p> <p>Or other valid response.</p> <p>Note: A variable or symbol may be used in place of the answer in the equation.</p>
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:

	<ul style="list-style-type: none"> • 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 <p>Student response is completely correct and shows thorough understanding.</p> <p>Sample Student Response:</p> $(280+280+350+56)-(238+238+350) = 140$ <p>There are 140 more floor seats in Setup 1 than in Setup 2.</p> <p>The number of floor seats for all the sections in Set-up 1: $280 + 280 + 350 + 56 = 966$.</p> <p>The number of floor seats for all the sections in Set-up 2: $238 + 238 + 350 = 826$.</p> <p>I subtracted to find how many more floor seats there are in Set-up 1 than in Set-up 2: $966 - 826 = 140$.</p> <p>Or other valid response.</p>
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.

#5 Rubric

Analytic Rubric

Score	Description
3	<p>Student response includes each of the following 3 elements:</p> <ul style="list-style-type: none"> 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, $10\frac{5}{8}$. <p>Sample Student Response:</p> <p>Add to find the length of each repeating pattern of blue, green, and gray stripes.</p> $\frac{3}{4} + 1\frac{1}{8} + \frac{1}{2} = \frac{6}{8} + \frac{9}{8} + \frac{4}{8} = \frac{19}{8}$ <p>Multiply to find the total length of 25 repeating patterns.</p> $25 \times \frac{19}{8} = \frac{475}{8} = 59\frac{3}{8}$ <p>The scarf is $59\frac{3}{8}$ inches long, so it is not long enough.</p> <p>Subtract to find the additional length needed.</p> $70 - 59\frac{3}{8} = 69\frac{8}{8} - 59\frac{3}{8} = 10\frac{5}{8}$ <p>To complete the scarf, $10\frac{5}{8}$ more inches need to be knitted.</p> <p>Or other valid response.</p>
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

Score	Description
3	<p>Student response includes the following 3 elements:</p> <ul style="list-style-type: none"> • Modeling component = 1 point: Valid equation to represent the situation • Computation component = 1 point: Correct answer: 966 ounces • Modeling component = 1 point: Valid work or explanation to represent the situation <p>Sample Student Response: The equation represents $(2 \times 9 \times 27) + (3 \times 32 \times 5) = x$ the total ounces of dried cranberries from the 9-ounce bags and 32-ounces boxes the store received on Wednesday. <i>(Note: students are not required to have a variable in the equation)</i></p> <p>The store received a total of 966 ounces of dried cranberries on Wednesday.</p> <p>First, I found out how many ounces of dried cranberries were in the cartons with the 9-ounce bags: $2 \times 9 \times 27 = 486$</p>

	<p>Then, I found out how many ounces of dried cranberries were in the cartons with the 32-ounce boxes: $3 \times 32 \times 5 = 480$</p> <p>Last, I added the products together to find out how many ounces of dried cranberries there were in all: $486 + 480 = 966$</p> <p>Or other valid response.</p>
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.

#13 Rubric

Holistic Rubric	
Score	Description
3	<p>Student response includes the following elements:</p> <ul style="list-style-type: none"> • Reasoning component = 1 point: Valid equation represented by the model • Reasoning Component = 1 point: Valid explanation of how the model represents the two decimals in the equation. • Reasoning Component = 1 point: Valid explanation of how the model represents the product. <p>Student response is completely correct and shows thorough understanding.</p> <p>Sample Student Response:</p> <p>The equation represented by the model is $3.2 \times 2.4 = 7.68$. 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 $2 + 0.4 = 2.4$.</p> <p>Each section of the model shows a partial product. The area</p>

	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.