



GRADE 5 IM INTERIM RUBRICS

4 Points:

Student response includes the following:

- Reasoning: identifying Lee as correct (Part A)
- Reasoning: correct explanation of why both expressions can be used (Part A)
- Reasoning: correct expression and explanation (Part B)
- Computation: correct answer of 16 ounces (Part B)

Sample Student Response:

Part A

I agree with Lee that both expressions can be used. Multiplication can be used because we are finding $\frac{1}{2}$ of $\frac{1}{4}$. Division can be used because the tea is shared equally between 2 cups.

Part B

8×2 . Since $\frac{1}{8}$ represents 2 ounces, and there are 8 eighths in a whole, we can also think about this as 8 groups of 2 and use multiplication. The cup can hold 16 ounces.

3 Points:

3 elements correct.

2 Points:

2 elements correct.

1 Point:

1 element correct.

0 Points:

Incorrect or irrelevant response.

4 Points:

Student response includes the following:

- Modeling: multiplying $\frac{1}{4} \times 8$ to find the length of rectangle A, and then multiplying their result by $6\frac{3}{4}$ to find the area of A.
- Modeling: multiplying $\frac{3}{4} \times 8$ (or subtracting $8 - 2$) to find the length of rectangle B. Multiplying $6\frac{3}{4} \times \frac{1}{3}$ to find the width of rectangle B. Multiplying their two answers together to find the area of B.
- Computation: Rectangle A correct answer, $13\frac{1}{2}$ or equivalent
- Computation: Rectangle B correct answer, $13\frac{1}{2}$ or equivalent

Sample Student Response:

Length of rectangle A: $\frac{1}{4} \times 8 = 2$

Area of rectangle A: $6\frac{3}{4} \times 2 = 13\frac{1}{2}$

Length of rectangle B: $\frac{3}{4} \times 8 = 6$ or $8 - 2 = 6$

Width of rectangle B: $6\frac{3}{4} \times \frac{1}{3} = 2\frac{1}{4}$

Area of rectangle B: $6 \times 2\frac{1}{4} = 13\frac{1}{2}$

3 Points:

3 elements correct.

2 Points:

2 elements correct.

1 Point:

1 element correct.

0 Points:

Incorrect or irrelevant response.

Grade 5 Interim B, #14

4 Points:

Student response includes the following:

- Reasoning: identifying the student as incorrect
- Reasoning: correctly identifying that different numbers will be stacked when the decimals are aligned
- Reasoning: correctly explaining why the decimals need to be aligned
- Computation: two correct sums, 7.95 and 58.44

Sample Student Response:

I disagree with the student. When adding decimals, the decimal points need to be aligned so that place values with the same value are added. When this is done, different numbers will be stacked and added together. The sums are 7.95 and 58.44.

3 Points:

3 elements correct.

2 Points:

2 elements correct.

1 Point:

1 element correct.

0 Points:

Incorrect or irrelevant response.

4 Points:

Student response includes the following:

- Modeling: correct and complete process to determine the number of baseballs and softballs that fit in each dimension
- Modeling: correct and complete process to determine the number of baseballs and softballs that fit in a shipping box
- Modeling: correct process to determine the difference, subtracting the number of softballs from the number of baseballs
- Computation: correct answer is 222 more baseballs

Sample Student Response:

Number of baseballs: After dividing each dimension by 3 inches, I found that 12 boxes can fit length wise, 8 boxes can fit width wise, and 4 boxes can be stacked high. I multiplied to find the volume $12 \times 8 \times 4 = 384$, meaning 384 baseballs can fit in the shipping box.

Number of softballs: After dividing each dimension by 4 inches, I found that 9 boxes can fit length wise, 6 boxes can fit width wise, and 3 boxes can be stacked high. I multiplied to find the volume $9 \times 6 \times 3 = 162$, meaning 162 softballs can fit in the shipping box.

How many more baseballs? $384 - 162 = 222$. Therefore, 222 more baseballs can fit in the shipping box.

3 Points:

3 elements correct.

2 Points:

2 elements correct.

1 Point:

1 element correct.

0 Points:

Incorrect or irrelevant response.

3 Points:

Student response includes the following:

- Reasoning: complete and correct explanation for why the answer is not reasonable
- Computation: correct answer, 4, 305
- Reasoning: complete and correct explanation of steps, including using place value understanding to explain why the digits in the second partial product should be moved over

Sample Student Response:

The answer is not reasonable, because $200 \times 2 = 400$, so $200 \times 20 = 4,000$. The answer should be in the thousands, not hundreds.

The correct answer is 4,305.

The digits in the second partial product should move over one place value to the left and there should be another zero at the end. This is because the second partial product represents multiplying 205×20 and not 205×2 .

2 Points:

2 elements correct.

1 Point:

1 element correct.

0 Points:

Incorrect or irrelevant response.

Grade 5 Interim C, #15

3 Points:

Student response includes the following:

- Modeling (2 points): correct and complete process to find how much more paint can fit in the container
- Computation (1 point): correct answer, the container can hold $\frac{3}{8}$ more pints of paint (or equivalent)

Scoring Note:

A student may earn 1 of the 2 modeling points if their process has a minor flaw. For example, if they add the three colors, but forget to subtract the sum from the container's size. Or if they subtract the colors from the container's size, but forget to subtract one of the colors.

Sample Student Response:

I found how much paint was made by adding together the ingredients: $1\frac{1}{2} + \frac{3}{4} + \frac{5}{8}$ rewritten with common denominators is $1\frac{4}{8} + \frac{6}{8} + \frac{5}{8}$ and the sum is $1\frac{15}{8}$ or $2\frac{7}{8}$ pints.

I found how much more could fit in the container by subtracting the amount of paint from the container's size: $3\frac{1}{4} - 2\frac{7}{8}$ rewritten with common denominators is $3\frac{2}{8} - 2\frac{7}{8}$. After regrouping, $2\frac{10}{8} - 2\frac{7}{8} = \frac{3}{8}$ more cups.

2 Points:

2 elements correct.

1 Point:

1 element correct.

0 Points:

Incorrect or irrelevant response.