GRADE 4 IM INTERIM RUBRICS

CENTERPOINT EDUCATION SOLUTIONS

Grade 4 Interim A, #14

3 Points:

Student response includes the following:

- Reasoning: complete and correct explanation of why Ben's reasoning is incorrect (Part A)
- Reasoning: complete and correct explanation of why the comparison statement is correct (Part B)
- Reasoning: correct comparison statement, $\frac{2}{12} < \frac{2}{6}$ or $\frac{2}{6} > \frac{2}{12}$ (Part B)

Sample Student Response:

No, Ben's reasoning is incorrect. Even though they each ate 2 pieces of cornbread, the sizes of the whole cornbread are different, so one piece from Ben's cornbread is not the same size as one piece from Ann's cornbread.

$\frac{2}{12} < \frac{2}{6}$

I know my comparison is correct because $\frac{1}{12}$ is less than $\frac{1}{6}$, so $\frac{2}{12}$ is less than $\frac{2}{6}$.

2 Points:

2 elements correct.

1 Point:

1 element correct.

0 Points:

Incorrect or irrelevant response.

Grade 4 Interim A, #15

3 Points:

Student response includes the following elements:

- Computation: correct answer (Part A)
- Modeling: correct explanation or equation (Part A)
- Modeling: correct sketch containing 40 squares (Part B)

Sample Student Response:

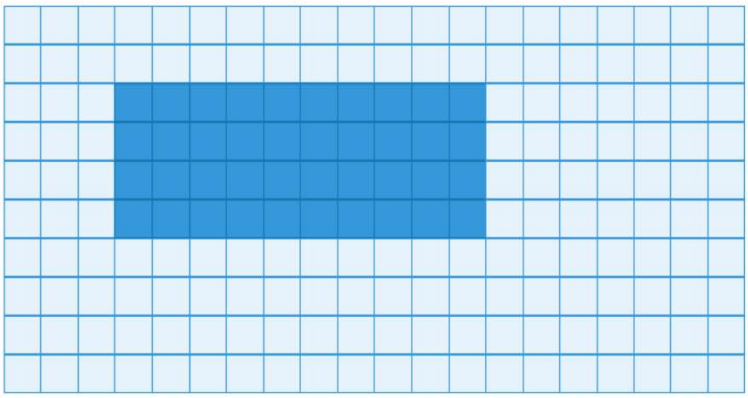
Part A

Sam has 40 fabric pieces.

5 x 8 = 40

Part B

Sketch of a rectangular array with dimensions 4 squares by 10 squares.



Note: In the given grid, other possible drawings include 5 squares by 8 squares, 8 squares by 5 squares, 10 squares by 4 squares, and 2 squares by 20 squares.

Grade 4 Interim A, #15 (continued)

2 Points:

2 elements correct.

1 Point:

1 element correct.

0 Points:

Incorrect or irrelevant response.

Grade 4 Interim B, #14

3 Points:

Student response includes the following:

- Reasoning: complete and correct explanation of how to use the diagram to find the product (2 points)
- Computation: correct product, $13,104$ (1 point)

Sample Student Response:

To find the value of $3,276 \times 4$, the diagram shows me that I need to find $3,000 \times 4$, 200×4, 70×4, and 6×4, and then add these values.

So, $3,276 \times 4 = 13,104$.

Note: Alternately, the student may show 4 multiplication equations and 1 addition equation as shown below for the reasoning component.

$3,000 \times 4 = 12,000$

$200 \times 4 = 800$

$70 \times 4 = 280$

$6 \times 4 = 24$

$12,000 + 800 + 280 + 24 = 13,104$

2 Points:

A complete and correct explanation of how to use the diagram, but an incorrect product or no product given. Or, a partial correct explanation with the correct product given.

1 Point:

Partial correct explanation only. Or, the correct product given only.

0 Points:

Incorrect or irrelevant response.

Grade 4 Interim B, #15

3 Points:

Student response includes the following:

- Modeling: complete and correct work (2 points)
- Computation: correct answer, 564 (1 point)

Sample Student Response:

$1,109 \times 3 = 3,327$

$1,109 + 3,327 = 4,436$

$5,000 - 4,436 = 564$

The students need to collect 564 books in order to reach their goal.

Note: Complete work includes both the multiplication and addition steps, followed by the subtraction step. Anything less is partial. Students may also choose to illustrate their calculations using rectangular arrays and/or area models, and if done correctly, should receive credit.

2 Points:

Complete and correct work with incorrect answer. Or correct answer with partial correct work.

1 Point:

Correct answer only. Or partial correct work only.

0 Points:

Incorrect or irrelevant response.

Grade 4 Interim C, #14

4 Points:

Student response includes the following:

- Reasoning: shows agreement with Ruth about the number of eggs collected in Part A
- Reasoning: complete and correct work or explanation to show agreement or disagreement with Ruth's conclusion about the number of boxes needed in Part A
- Reasoning: complete and correct work or explanation to determine the number of boxes needed in Part B, e.g., $(752 + 164) \times 4 = 3,664$ and $3,664 \div 6 = 610$ with remainder 4
- Reasoning: correct interpretation of the remainder, e.g., 4 eggs is not enough to fill a box, so only 610 boxes are needed

Refer to the Scoring Notes below for additional acceptable answers.

Sample Student Response:

Part A – 2 points

I agree with Ruth's answer and work that she will collect $3,008$ eggs. For the number of boxes, I agree with Ruth's answer of 501 with remainder 2, but I disagree with her thinking about the number of boxes needed. 501 with remainder 2 means 501 full boxes of eggs and the remainder of 2 means that the next box would have only 2 eggs instead of 6 eggs. Since Ruth sells eggs in boxes of 6, then she will need only 501 boxes.

Part B – 2 points

$752 + 164 = 916$

$916 \times 4 = 3,664$

$3,664 \div 6 = 610$ with remainder 4

Since 4 eggs is not enough to fill a box, Ruth will need 610 boxes at the end of the week.

Grade 4 Interim C, #14 (continued)

Scoring Notes:

- In Part A, credit should be given if the student agrees with Ruth's answer of 501 with remainder 2 but:
  - explains that Ruth needs 502 boxes because she will put the remaining two eggs in 1 extra box, or
  - explains that Ruth needs 503 boxes because she will put one egg in each of the 2 extra boxes.
- In Part B, credit should be given if the student:
  - reasons that 611, 612, 613, or 614 boxes are needed because Ruth will put the remaining four eggs in $1-4$ extra boxes, respectively, or
  - builds upon their (correct, partially correct, or incorrect) answer in Part A by determining that the additional 164 chickens will lay 656 eggs and reasons that:
    - Ruth will need 110 boxes (109 boxes with six eggs each and 1 extra box with the remaining two eggs) and adds 110 to the number of boxes in Part A, or
    - Ruth will need 111 boxes (109 boxes with six eggs each and 2 extra boxes with one each of the remaining two eggs) and adds 111 to the number of boxes in Part A.
- Although these alternate responses do not account for the selling aspect of the eggs, these are acceptable interpretations of the remainder in each part.

3 Points:

3 elements correct.

2 Points:

2 elements correct.

1 Point:

1 element correct.

0 Points:

Incorrect or irrelevant response.

Grade 4 Interim C, #15

3 Points:

Student response includes the following:

- Modeling: complete and correct work or explanation for determining the amount of each type of filling used yesterday
- Modeling: complete statement or explanation for finding the difference in the amounts of filling used yesterday
- Computation: correct answer, $14\frac{2}{3}$ cups

Note: Students should receive the second modeling point if they identify they need to find the difference in the amounts of each type of filling but (a) use incorrect quantities from the first modeling part or (b) compute an incorrect difference.

Sample Student Response:

Al Pastor filling: $96 \times \frac{3}{8} \times = \frac{288}{8}$ cups

Asada filling: $64 \times \frac{1}{3} = \frac{64}{3}$ cups

$\frac{288}{8} = 36$

$\frac{64}{3} = 21\frac{1}{3}$

$36 - 21\frac{1}{3} = \frac{44}{3}$ or $14\frac{2}{3}$

Aaron used $14\frac{2}{3}$ cups more Al Pastor filling than Asada filling to make tacos yesterday.

2 Points:

2 elements correct.

1 Point:

1 element correct.

0 Points:

Incorrect or irrelevant response.