GRADE 3 IM INTERIM RUBRICS

3 Points:

Student response includes the following:

- Reasoning: complete and correct explanation of why Sam's work is incorrect
- Reasoning: complete and correct explanation of how Sam can correct his mistake
- Computation: correct answer is 491

Sample Student Response:

Sam subtracted $90 - 80$ instead of $80 - 90$, which is not the same thing. Sam didn't have enough tens.

I would tell Sam to decompose one of the hundreds to make more tens. Cross out the 900 and write 800 to show that you decomposed one of the hundreds to make more tens. Then record 180 above the 80 to show that you have 18 tens. Then subtract $180 - 90$ to get 90. And subtract $800 - 400$ to get 400.

$988 - 497 = 491$

Notes:

- For the first reasoning point, credit should not be given if the student only identifies that Sam's answer of 511 is incorrect.
- A variety of explanations are possible. As long as the explanations show a clear understanding of the error made and how to correct Sam's mistake, credit should be given.

2 Points:

2 elements correct.

1 Point:

1 element correct.

0 Points:

Incorrect or irrelevant response.

3 Points:

Student response includes the following:

- Modeling: complete statement or work for finding the height of the white totem pole
- Modeling: complete statement or work for finding the sum of the heights of all three totem poles
- Computation: correct answer is 95

Sample Student Response:

The height of the white totem pole is $49 - 22 = 27$.

The sum of the heights of all three totem poles is $19 + 49 + 27$.

The sum of the heights of the three totem poles is 95 feet.

Notes:

- Students should receive the first modeling point if they identify that they need to find the difference of $49 - 22$ but make a computation error.
- Students should receive the second modeling point if they identify that they need to find the sum of the three heights but use an incorrect height for the white totem pole.
- Students whose method for finding the sum of the heights of all three totem poles is $19 + 49 + 49 - 22$ should be given credit for both modeling points.
- The student does not need to include the unit of feet within the equations or answer to be given credit.

2 Points:

2 elements correct.

1 Point:

1 element correct.

0 Points:

Incorrect or irrelevant response.

4 Points:

Student response includes the following:

- Computation: the student provides a correct comparison statement for Part A, $\frac{24}{6} > \frac{4}{6}$ or $\frac{4}{6} < \frac{24}{6}$
- Reasoning: the student correctly explains why the comparison statement in Part A is correct
- Computation: the student provides a correct comparison statement for Part B, $\frac{5}{8} < \frac{5}{3}$ or $\frac{5}{3} > \frac{5}{8}$
- Reasoning: the student correctly explains why the comparison statement in Part B is correct

Sample Student Response:

$$\frac{24}{6} > \frac{4}{6}$$

Since each fraction has the same denominator of 6, then I know I am comparing fractions that are made of same-sized parts. Each fraction has 6 parts that make the whole and each part is a sixth. So all I need to do is compare the numerators to see which fraction has more parts. 24 sixths is more than 4 sixths.

$$\frac{5}{8} < \frac{5}{3}$$

Since both fractions have the same numerator of 5, then each fraction has the same number of parts. But I looked at the denominators to figure out which fraction is made up of larger parts. On a number line, if I mark off eighths and thirds, 1/8 is closer to 0 compared to 1/3, so I know that eighths are smaller than thirds. So 5/8 is made up of smaller parts compared to 5/3.

Note: Other valid explanations for why each comparison statement is correct exists (e.g., reasoning about their size using a number line, recognizing and comparing equivalent fractions) and if correctly explained should receive credit for the respective reasoning point.

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:

- Modeling: complete statement or work for finding the number of flowers and the number of shells Kai used
- Modeling: complete statement or work for finding the difference in the number of shells and the number of flowers Kai used
- Computation: correct calculation, 28

Sample Student Response:

The number of flowers that Kai used is $9 \times 4 = 36$.

The number of shells that Kai used is $8 \times 8 = 64$.

Then, I subtracted 36 from 64 to find how many more shells than flowers Kai used to get my answer of 28.

Notes:

- Students should receive the first modeling point if they identify they need to find the products of 9×4 and 8×8 but make one or more computation errors. Students must identify the correct factors for each multiplication expression in order to receive the first modeling point.
- Students should receive the second modeling point if they identify they need to find the difference between the number of shells and the number of flowers Kai used but use an incorrect number for the number of shells and/or the number of flowers.
- The student does not need to include the unit of flowers and/or shells within the equations or answer to be given credit for a correct explanation or correct answer.

2 Points:

2 elements correct.

1 Point:

1 element correct.

0 Points:

Incorrect or irrelevant response.

3 Points:

Student response includes the following 3 elements:

- Reasoning: the student provides correct work or correctly explains how to find the perimeter of each rectangle in Part A
- Reasoning: the student provides correct work or correctly explains how to find the area of each rectangle in Part A
- Computation: the student provides the correct perimeter and area of each rectangle in Part A
    - Grid 1: 14 units and 12 square units
    - Grid 2: 14 units and 10 square units (2×5 rectangle) or 14 units and 6 square units (1×6 rectangle)

Sample Student Response:

Grid 1 rectangle has a perimeter of 14 units. Grid 1 rectangle has an area of 12 square units.

Grid 2 rectangle has a perimeter of 14 units. Grid 2 rectangle has an area of 10 square units.

To find the perimeter of each rectangle, I added the side lengths. In Grid 1, I added $4 + 3 + 4 + 3 = 14$. In Grid 2, I added $5 + 2 + 5 + 2 = 14$.

To find the area of each rectangle, I multiplied the side lengths. In Grid 1, I multiplied $4 \times 3 = 12$. In Grid 2, I multiplied $5 \times 2 = 10$.

Notes:

- If one or more computation mistakes are made, credit cannot be given for the computation component, but credit can be given for a valid explanation.
- Students should receive credit for the computation point if they accurately calculate the perimeter and area of an incorrect rectangle in Grid 2 from Part A.
- Other valid explanations for how to find the perimeter and how to find the area exists (e.g., measure area by counting unit squares) and, if correctly explained, should receive credit for the respective reasoning point.
- The student does not need to include the unit labels of units for perimeter and/or square units for area within their explanations or answers to be given credit.

2 Points:

2 elements correct.

1 Point:

1 element correct.

0 Points:

Incorrect or irrelevant response.

3 Points:

Student response includes the following:

- Modeling: complete statement or work for finding the total amount of bamboo the zookeeper fed the panda during the 5 days
- Modeling: complete statement or work for finding the difference between the total amount of bamboo the zookeeper fed the panda during the 5 days and the amount of bamboo the zookeeper has to feed the panda
- Computation: correct weight, in kilograms, of the amount of bamboo left, 170

Sample Student Response:

$3 \times 14 = 42$ kg

$2 \times 18 = 36$ kg

$42 + 36 = 78$ kg total in 5 days

$248 - 78 = 170$ kg

170 kg of bamboo are left after 5 days.

Notes:

- Students should receive the first modeling point if they identify that they need to find the sum of the products of 3×14 and 2×18 but make 1 or more computation errors.
- Students should receive the second modeling point if they identify that they need to find the difference between the total amount of bamboo the zookeeper fed the panda during the 5 days and the amount of bamboo the zookeeper has to feed the panda but use an incorrect value for the total amount of bamboo the zookeeper fed the panda during the 5 days or make a computation error.
- Students whose method for finding the amount of bamboo left is $248 - 14 - 14 - 14 - 18 - 18$ should be given credit for both modeling points.
- The student does not need to include the unit of kilograms within the equations or answer to be given credit for a correct explanation or correct weight.

2 Points:

2 elements correct.

1 Point:

1 element correct.

0 Points:

Incorrect or irrelevant response.