7. John is going camping for 7 days. He plans to take his dog with him. He knows that his dog eats $\frac{3}{4}$ pound of dog food per day. The pet store has 3 different bags of dog food. One bag is 3 pounds, one is 8 pounds, and one is 10 pounds.

Part A. Which single bag will have enough food for his dog and have the least amount left over?

Part B. John can buy more than one of the same bag in order to have less left over. Will this help him? Explain.

Scoring Instructions:

Rubric:

2 Work demonstrates a **clear and complete** understanding of the mathematical concepts and/or procedures required by the task. Appropriate strategy is shown with clear and complete explanations and interpretations.

1 Response demonstrates a **partial** understanding of the mathematical concepts and/or procedures. Appropriate strategy is shown, but explanation or interpretation has minor flaws.
OR
Response is incorrect because of calculation errors. Work and strategy indicate a **clear** understanding of the mathematical concepts and/or procedures required by the task.

0 Response is irrelevant, inappropriate, or not provided.

SCORING EXEMPLAR
Maximum Points—2

Part A – 1 point

- John will need $5\frac{1}{4}$ pounds of food because $7 \times \frac{3}{4} = \frac{21}{4} = 5\frac{1}{4}$.
- John should buy the 8-pound bag because it would have enough for the entire trip and have only $2\frac{3}{4}$ pounds left over, whereas the 5-pound bag doesn't have enough food for the trip and the 10-pound bag has too much left over ($4\frac{3}{4}$ pounds).

or equivalent work

Part B – 1 point

- It would help because if John buys two 3-pound bags, he would have only $\frac{3}{4}$ pound left over, which would be less than the amount left over from buying an 8-pound bag.

or equivalent work

8. What fraction should be multiplied by $\frac{2}{3}$ to create an equivalent fraction with a denominator of 24?

Scoring Instructions:

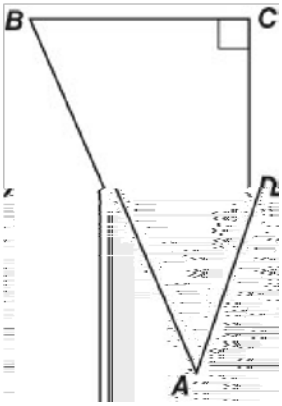
$\frac{8}{8}$

9. Each row of strawberries Julia planted was 12 yards long. What was the length, in feet, of each row?

Scoring Instructions:

36 or equivalent response

12. Marissa is making a stained-glass window. She uses pieces of glass in different shapes. Here is a drawing of one piece that Marissa is using for her stained-glass window.



Part A. Label the four angles in Marissa's piece of stained glass as acute, right, or obtuse.

Part B. Which line segment is perpendicular to $\overline{BC}$?

Part C. Draw a design for another piece of glass Marissa could use. It should be a quadrilateral with exactly two right angles and exactly one set of parallel lines. Label the vertices M, N, O, and P.

Part D. Label the angles as acute, right, or obtuse and state which two line segments are parallel.

Place an "X" in the answer box below.

Answer the question on the Response Document provided.

Click next.

Scoring Instructions:

Rubric:

4 Work demonstrates a **clear and complete** understanding of the mathematical concepts and/or procedures required by the task. Appropriate strategy is shown with clear and complete explanations and interpretations.

3 Work demonstrates a **clear** understanding of the mathematical concepts and/or procedures but is not complete. Appropriate strategy is shown, but explanation or interpretation has minor flaws.
OR
Response is incorrect because of calculation errors. Work and strategy indicate a **clear** demonstration of the problem.

2 Response demonstrates a **partial** understanding of the mathematical concepts and/or procedures. Appropriate strategy is shown, but explanation or interpretation has minor flaws.

1 Response shows **minimal** understanding of the mathematical concepts and/or procedures or provides no explanation or interpretation for the solution or shows major flaws.

0 Response is irrelevant, inappropriate, or not provided.

SCORING EXEMPLAR
Maximum Points—4

Part A – 1 point

- $\angle A$ and $\angle B$ are acute, $\angle C$ is a right angle, and $\angle D$ is an obtuse angle.

or equivalent explanations

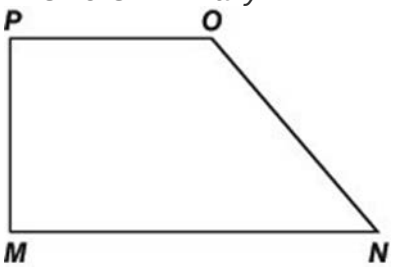
Part B – 1 point

- $\overline{CD}$

or equivalent

Part C – 1 point

Answers will vary



or equivalent quadrilateral that has 2 right angles and one set of parallel lines
or other acceptable answer

Part D – 1 point

Answers will vary

- All angles labeled correctly such as

Angle N is acute, angles M and P are right, angle O is obtuse, and the two line segments MN and PO are parallel.
or equivalent work

18. Shawna started with the number 121 and used the rule "subtract 4" to create the number pattern below.

$121, 117, 113,$ ___, $105,$ ___, 97

Part A. What are the two missing terms in this number pattern?

Part B. What are the next two terms in this pattern after 97?

Part C. Other than the rule "subtract 4", write an observation about all the terms in this number pattern.

Part D. Explain how the answer to Part C would or would not change if the rule for Shawna's number pattern was "subtract 2" and the starting number was 121.

Scoring Instructions:

Rubric:

4 Work demonstrates a **clear and complete** understanding of the mathematical concepts and/or procedures required by the task. Appropriate strategy is shown with clear and complete explanations and interpretations.

3 Work demonstrates a **clear** understanding of the mathematical concepts and/or procedures but is not complete. Appropriate strategy is shown, but explanation or interpretation has minor flaws.

2 Response demonstrates a **partial** understanding of the mathematical concepts and/or procedures. Appropriate strategy is shown, but explanation or interpretation has minor flaws.

1 Response shows **minimal** understanding of the mathematical concepts and/or procedures. Appropriate strategy is shown, but explanation or interpretation has minor flaws.

0 Response is irrelevant, inappropriate, or not provided.

Maximum Points—4

Part A –1 point

109, 101

Part B – 1 point

93, 89

Part C – 1 point

Student states all the terms in the number pattern are odd numbers.
or other correct observation.

Part D – 1 point

Student explains that the answer to Part C would not change because all terms in the number pattern are odd numbers.
or other correct explanation corresponding to the observation in Part C.

20. Tyrell painted $\frac{8}{10}$ of a poster gray. He painted $\frac{13}{100}$ of the same poster red. What was the total fraction of the poster that was painted gray and red?

Scoring Instructions:

$\frac{93}{100}$