Name _____   Date _____

1. A rectangular porch is 4 feet wide. It is 3 times as long as it is wide.

    a. Label the diagram with the dimensions of the porch.

    b. Find the perimeter of the porch.

2. A narrow rectangular banner is 5 inches wide. It is 6 times as long as it is wide.

    a. Draw a diagram of the banner, and label its dimensions.

    b. Find the perimeter and area of the banner.

Lesson 2:   Solve multiplicative comparison word problems by applying the area
and perimeter formulas.

engage^ny   40

3. The area of a rectangle is 42 square centimeters. Its length is 7 centimeters.

   a. What is the width of the rectangle?

   b. Charlie wants to draw a second rectangle that is the same length but is 3 times as wide. Draw and label Charlie's second rectangle.

   c. What is the perimeter of Charlie's second rectangle?

Lesson 2: Solve multiplicative comparison word problems by applying the area and perimeter formulas.

41

4. The area of Betsy's rectangular sandbox is 20 square feet. The longer side measures 5 feet. The sandbox at the park is twice as long and twice as wide as Betsy's.

   a. Draw and label a diagram of Betsy's sandbox. What is its perimeter?

   b. Draw and label a diagram of the sandbox at the park. What is its perimeter?

   c. What is the relationship between the two perimeters?

   d. Find the area of the park's sandbox using the formula A = $l \times w$.

e.   The sandbox at the park has an area that is how many times that of Betsy's sandbox?

f.   Compare how the perimeter changed with how the area changed between the two sandboxes. Explain what you notice using words, pictures, or numbers.

Lesson 2:   Solve multiplicative comparison word problems by applying the area and perimeter formulas.

engage^{ny}   43