Name _____   Date _____

Practice B
For use with pages 356–363
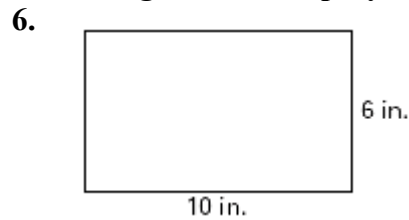
Simplify the ratio.
  1. $12:$16

  2. $\dfrac{32 \text{ in.}^2}{8 \text{ in.}^2}$

  3. $\dfrac{6 \text{ cm}}{14 \text{ cm}}$

  4. $\dfrac{10 \text{ in.}}{2 \text{ ft}}$

Find the ratio of the width to the length of the rectangle. Then simplify the ratio.
  5.   6.

4 cm
12 cm

6 in.
10 in.

The measures of the angles of a triangle are in the extended ratio given. Find the measures of the angles of the triangle.
  7. $1:7:10$
  8. $7:14:15$

Solve the proportion.
  9. $\dfrac{3}{m+5} = \dfrac{2}{m+1}$

  10. $\dfrac{2}{k-1} = \dfrac{5}{3k-4}$

  11. $\dfrac{y-2}{2} = \dfrac{2y-3}{5}$

  12. $\dfrac{8}{z-2} = \dfrac{z+2}{4}$

Find the geometric mean of the two numbers.

    13. 10 and 12

    14. 9 and 13

Let $x = 6$, $y = 3$, and $z = 2$. Write the ratio in simplest form.
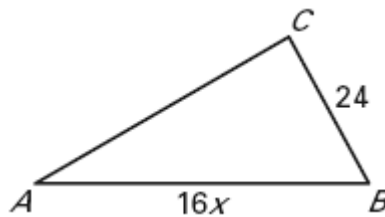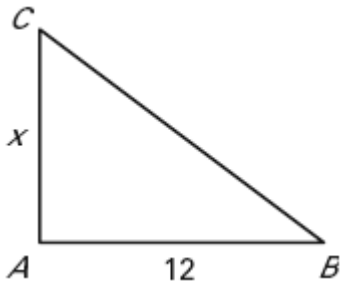
    15. $\dfrac{4z-3}{x}$

    16. $\dfrac{z+2y}{2x-4}$

In Exercises 37–39, the ratio of two side lengths for the triangle is given. Solve for the variable.

    17. $AC : AB$ is 3:4.   **18.** $AB : CB$ is $2 : 1$

In Exercises 41 and 42, use the following information.
Golden Gate Bridge You purchase a scale model of the Golden Gate Bridge, which is located near San Francisco, California. The model states that the scale is 1 inch: 50 feet. The actual length of the bridge is 8980 feet.

    19. What is the length of the model?

    20. The model is approximately 15 inches tall. What is the actual height of the bridge?