

Triangles ABC and DEF are congruent.

- **1.** Which angle of *DEF* corresponds to $\angle C$?
- **2.** What is the perimeter of *DEF*?



Check It Out

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Tell whether the blue figure is a *translation*, *reflection*, *rotation*, or *dilation* of the red figure.



- **7.** The vertices of a triangle are A(2, 5), B(1, 2), and C(3, 1). Reflect the triangle in the *x*-axis, and then rotate the triangle 90° counterclockwise about the origin. What are the coordinates of the image?
- **8.** The vertices of a triangle are A(2, 4), B(2, 1), and C(5, 1). Dilate the triangle with respect to the origin using a scale factor of 2. Then translate the triangle 2 units left and 1 unit up. What are the coordinates of the image?
- **9.** Tell whether the parallelograms are similar. Explain your reasoning.



The two figures are similar. Find the ratios (red to blue) of the perimeters and of the areas.



- **12. SCREENS** A wide-screen television measures 36 inches by 54 inches. A movie theater screen measures 42 feet by 63 feet. Are the screens similar? Explain.
- **13. CURTAINS** You want to use the rectangular piece of fabric shown to make a set of curtains for your window. Name the types of congruent shapes you can make with one straight cut. Draw an example of each type.

