

Unit 2: Scale Drawings, Similarity, and Slope

PRACTICE • SET 2

Name: _____ Date: _____

Solve each problem and write your exact answer (a number, fraction, or coordinate pair) on the line. Show enough work to check.

1. A figure is enlarged using a scale factor of $\frac{3}{2}$. One side of the original figure is 8 cm long. How long is the corresponding side in the scaled copy?

Answer: _____

2. A scaled copy is made of a triangle. A side that was 5 cm in the original is 20 cm in the copy. What is the scale factor from the original to the copy?

Answer: _____

3. On a scale drawing the scale is 1 in : 6 ft. A wall is 4.5 in long in the drawing. What is the actual length of the wall, in feet?

Answer: _____

4. A map uses the scale 1 cm : 8 km. Two towns are actually 96 km apart. How far apart are they on the map, in centimeters?

Answer: _____

5. A polygon has area 5 square units. It is scaled by a scale factor of 3. What is the area of the scaled copy, in square units?

Answer: _____

6. The point $(-2, 4)$ is dilated using the origin as the center and a scale factor of 5. What are the coordinates of the image point?

Answer: _____

7. The point $(10, -6)$ is dilated using the origin as the center and a scale factor of $\frac{1}{2}$. What are the coordinates of the image point?

Answer: _____

8. Two triangles are similar. In the first triangle two sides are 3 and 7. In the second triangle the side corresponding to the 3 is 9. What is the length of the side corresponding to the 7?

Answer: _____

9. Find the slope of the line that passes through the points $(-1, 2)$ and $(3, 14)$.

Answer: _____

10. A line goes up 10 units for every 4 units it moves to the right. Write its slope as a fraction in simplest form.

Answer: _____

11. A line passes through the origin and through the point (6, 15). What is the slope of the line?

Answer: _____

12. A line has equation $y = -2x + 5$. What is the value of y when $x = 4$?

Answer: _____