

Unit 1: Scale Drawings

CONCEPT

Name: _____ Date: _____

Solve each problem and write your short answer on the line. Show your scale-factor thinking where it helps.

1. A scaled copy is made with scale factor 3. A side in the original is 4 cm long. How long is the matching side in the copy?

Answer: _____

3. In a scaled copy, an original length of 6 cm becomes 18 cm in the copy. What is the scale factor (copy to original)?

Answer: _____

5. A scaled copy has scale factor 4. A copy side is 24 cm. How long is the matching side in the original?

Answer: _____

7. On a map, 1 cm represents 8 km. An actual distance is 56 km. How many centimeters long is it on the map?

Answer: _____

9. A rectangle is scaled by factor 2. Its area was 5 square cm. What is the area of the scaled copy in square cm?

Answer: _____

11. In a scaled copy with scale factor 2, a side is 7 cm in the original. What is the length of the matching side in the copy?

Answer: _____

2. A scaled copy uses scale factor $\frac{1}{2}$. An original side is 10 cm. How long is the matching side in the copy?

Answer: _____

4. A scale drawing has scale factor 5. The drawing shows a length of 40 cm. What is the matching length in the original? (Give the original length.)

Answer: _____

6. On a map, the scale is 1 cm represents 20 km. A road is 3 cm long on the map. How many kilometers is the actual road?

Answer: _____

8. A scale drawing uses scale factor $\frac{1}{4}$. A real object is 32 cm tall. How tall is it in the drawing?

Answer: _____

10. A figure is scaled by factor 3. Its original area was 4 square cm. What is the area of the scaled copy in square cm?

Answer: _____

12. A scaled copy of a triangle uses scale factor $\frac{1}{3}$. A side in the original is 9 cm. How long is the matching side in the copy?

Answer: _____