

Lesson 7 Practice Problems

1. A scale drawing of a car is presented in the following three scales. Order the scale drawings from smallest to largest. Explain your reasoning. (There are about 1.1 yards in a meter, and 2.54 cm in an inch.)
 - a. 1 in to 1 ft
 - b. 1 in to 1 m
 - c. 1 in to 1 yd

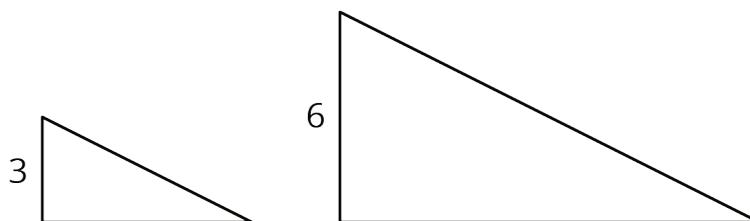
2. Elena finds that the area of a house on a scale drawing is 25 square inches. The actual area of the house is 2,025 square feet. What is the scale of the drawing?

3. Which scales are equivalent to 1 inch to 1 foot? Select **all** that apply.
 - A. 1 to 12
 - B. $\frac{1}{12}$ to 1
 - C. 100 to 0.12
 - D. 5 to 60
 - E. 36 to 3
 - F. 9 to 108

4. Which of these scales are equivalent to 3 cm to 4 km? Select **all** that apply. Recall that 1 inch is 2.54 centimeters.

- A. 0.75 cm to 1 km
- B. 1 cm to 12 km
- C. 6 mm to 2 km
- D. 0.3 mm to 40 m
- E. 1 inch to 7.62 km

5. These two triangles are scaled copies of one another. The area of the smaller triangle is 9 square units. What is the area of the larger triangle? Explain or show how you know.



6. Figures R, S, and T are all scaled copies of one another. Figure S is a scaled copy of R using a scale factor of 3. Figure T is a scaled copy of S using a scale factor of 2. Find the scale factors for each of the following:

- a. From T to S
- b. From S to R
- c. From R to T
- d. From T to R

(From Unit 2, Lesson 3.)