### 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.)
	1. 1 in to 1 ft
	2. 1 in to 1 m
	3. 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.
	1. 1 to 12
	2. $\frac{1}{12} to 1$
	3. 100 to 0.12
	4. 5 to 60
	5. 36 to 3
	6. 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.
	1. 0.75 cm to 1 km
	2. 1 cm to 12 km
	3. 6 mm to 2 km
	4. 0.3 mm to 40 m
	5. 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.
* 
*
1. 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:
	1. From T to S
	2. From S to R
	3. From R to T
	4. From T to R
* (From Unit 2, Lesson 3.)



© CC BY Open Up Resources. Adaptations CC BY IM.