

Scale Drawings Practice Worksheets

Scale Drawings
(Using a scale to find a missing length)

Name _____

For each problem, write a proportion and show your work. Be sure to label your answer with appropriate units.

- 1 Gina is on a road trip, and is reading a map that has a scale of 1 in 20 miles. Her trip measures 35 inches on the map. What will be her actual distance for the trip?
- 2 Jim is building a model airplane. The scale is 1 in 40 ft. The actual wingspan of the plane is 211 feet. How long will wings of the model be?

Scale Drawings
(Reproducing a scale drawing)

Name _____

For each problem, draw a new figure using the given scale. Calculate and compare the given measurements for both the original figure and the scale drawings.

- 1 Scale factor = 3
- 2 Scale factor = $\frac{1}{3}$

Scale Drawings
(Determining the scale factor of a scale drawing)

Name _____

For each problem, show the ratio to determine the scale factor. Simplify any fractions, if possible.

- 1 Original Image: 125 in, Scale Drawing: 0.75 in, Scale Factor =
- 2 Original Image: 2 inches, Scale Drawing: 3.5 inches, Scale Factor =
- 3 Original Image: 1.75 in, Scale Drawing: 0.75 in, Scale Factor =
- 4 Original Image: 4 cm, Scale Drawing: 6 cm, Scale Factor =
- 5 Original Image: 12 cm, Scale Drawing: 6 cm, Scale Factor =
- 6 Original Image: 3 cm, Scale Drawing: 5 cm, Scale Factor =

Scale Drawings
(Calculating the Area of Scale Drawings)

Name _____

For each problem, write a proportion and show your work. Be sure to label your answer with appropriate units.

- 1 A blue print for a house has a scale of 1 in 5 feet. The living room has a length of 25 inches and a width of 3 inches. What is the actual area of the living room?
- 2 Find the area of the square below when it is increased by a scale factor of 3. 32 cm
- 3 Brianna had a garden box in her back yard that is 8 feet by 2 feet. This summer decides that it is too big and wants to reduce it by a scale factor of $\frac{1}{2}$. Find the area of her new garden. Last summer, Brianna planted 2 plants per square foot in her garden box. How many plants will she plant this summer?
- 4 In a scale drawing of a rectangular swimming pool, the scale is $\frac{1}{4}$ inch = 4 feet. Find the perimeter and area of the swimming pool. 15 in, 35 in.
- 5 What scale factor would increase the size of the rectangle so that it has an area of 96 cm²? 2 cm, 3 cm
- 6 A blue print of a house has a scale of 15 in 5 feet. Ethan has a ping pong table that is 4 feet by 5 feet. Would it fit in a space that has drawing dimensions of 3 inches by 4 inches? Justify your answer.

