



Unit 7 Lesson 2.

HW #2.8 Name: _____

Front only

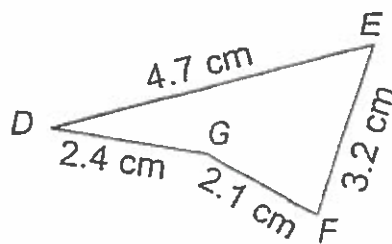
- 1 Rectangle $ABCD$ has a length of 15 centimeters and a perimeter of 44 centimeters. If a scale factor of 3 is applied to each dimension, what will be the width of the new rectangle?

- A 21 cm
- B 42 cm
- C 45 cm
- D 132 cm

- 2 A parallelogram has a perimeter of 24 inches. If a scale factor of 3 is applied to the base and height of the parallelogram, what will be the perimeter of the new parallelogram?

- A 8 inches
- B 24 inches
- C 27 inches
- D 72 inches

- 3 Quadrilateral $DEFG$ is shown below.



If a scale factor of $\frac{1}{4}$ is applied to each dimension, what will be the perimeter of the new quadrilateral?

- A 0.25 cm
- B 3.1 cm
- C 12.4 cm
- D 49.6 cm

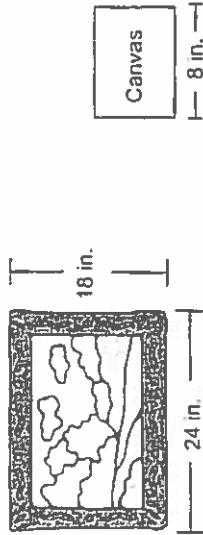
- 4 A scale factor of 2 was applied to rectangle A to create a similar rectangle B . If the perimeter of rectangle B is 56 inches, what is the perimeter of rectangle A ?

- A 112 inches
- B 56 inches
- C 28 inches
- D 14 inches

If the original perimeter of a 2-D shape is 27in and the scale factor of $\frac{1}{3}$ was applied to each dimension, what is the new perimeter?

If the original perimeter of a 2-D shape is 40ft and the new perimeter is 8ft, what scale factor was applied?

Bobby painted the picture shown below. He wants to paint the scene again on a smaller canvas.



What is the area of the canvas?

- A. 48 square inches
- B. 54 square inches
- C. 72 square inches
- D. 144 square inches

A rectangular kitchen measures 8 feet by 12 feet. During a home remodeling project, the kitchen is enlarged so that each of the dimensions are doubled. What is the area of the enlarged kitchen?

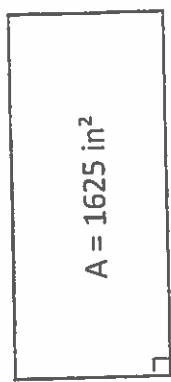
- A. 40 ft²
- B. 96 ft²
- C. 192 ft²
- D. 384 ft²

A circle is dilated by a scale factor of 1.04 to create a new circle. How does the area of the new circle compare with the area of the original circle?

- A. The area of the new circle is $(1.04)^1$ times the area of the original circle.
- B. The area of the new circle is $(1.04)^2$ times the area of the original circle.
- C. The area of the new circle is $(1.04)^3$ times the area of the original circle.
- D. The area of the new circle is $(1.04)^4$ times the area of the original circle.

Ms. Stanley is making a scale drawing of the arrangement of tables in her classroom.

Actual Table



Scale Drawing



What scale factor was applied to the dimensions of the actual table to create the scale drawing?

- A. $\frac{1}{5}$
- B. $\frac{1}{10}$
- C. $\frac{1}{15}$
- D. $\frac{1}{25}$