

Homework 12/9/19

Name: _____

Date: _____

1. Howard has a scale model of the Statue of Liberty.

- The model is 15 inches tall.
- The scale of the model to the actual statue is 1 inch : 6.2 meters.

Which equation can Howard use to determine x , the height in meters, of the Statue of Liberty?

- A. $15x = 6.2$ B. $6.2x = 15$ C. $\frac{1}{6.2} = \frac{x}{15}$ D. $\frac{1}{6.2} = \frac{15}{x}$

2. The rectangular floor of a classroom is 36 feet in length and 32 feet in width. A scale drawing of the floor has a length of 9 inches. What is the area, in square inches, of the floor in the scale drawing?

3. The scale of a model train is 1 inch to 13.5 feet. One of the cars of the model train is 5 inches long. What is the length, in feet, of the actual train car?

- A. 67.5 B. 32.4 C. 14.5 D. 2.7

4. The circumference of a circle is 11π inches.

What is the area, in square inches, of the circle? Express your answer in terms of π .

5. What is the radius, in centimeters, of a circle that has a circumference of 16π centimeters?

- A. 8 B. 16 C. 32 D. 64

6. The circumference of a circle is 15π centimeters. What is the area of the circle in terms of π ?
- A. $7.5\pi \text{ cm}^2$ B. $15\pi \text{ cm}^2$ C. $56.25\pi \text{ cm}^2$ D. $225\pi \text{ cm}^2$

7. A contractor is building the base of a circular fountain. On the blueprint, the base of the fountain has a diameter of 18 centimeters. The blueprint has a scale of three centimeters to four feet. What will be the actual area of the base of the fountain, in square feet, after it is built? Round your answer to the nearest tenth of a square foot.