

Homework 8-4

Scale & Scale Factor

Unit 8

Review: Customary Conversion. Round to the nearest tenth if necessary.

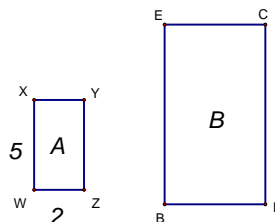
1. 4 pints = _____ fluid ounces
2. 10 quarts = _____ gallons
3. 7 yards = _____ feet
4. 20 gallons = _____ pints
5. 2.5 cups = _____ tablespoons

Customary Conversions

8 fluid ounces = 1 cup
 2 cups = 1 pint
 2 pints = 1 quart
 4 quarts = 1 gallon
 8 pints = 1 gallon
 3 teaspoons = 1 tablespoon
 16 tablespoons = 1 cup
 16 fluid ounces = 1 pint
 16 ounces = 1 pound
 5,280 feet = 1 mile
 12 inches = 1 foot
 3 feet = 1 yard

*****In the figure below, the scale factor from A to B is 3.**

6. Find the length of side BD.
7. Find the length of EB.
8. Find the scale factor from B to A.



Find the scale for the following:

9. Find model : actual. A building that is 120 feet tall and a drawing where the height of the same building measures 6 inches.
10. Find actual : model. A person who is 64 inches tall and whose billboard poster shows them as 36 feet tall.

Answer the following questions.

11. The scale of a map is 3 inches : 100 miles.
Two cities are 0.6 inches apart on the map.
Find the actual distance between the cities.

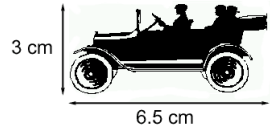
12. A drawing has a scale of 5 cm : 3 m to the actual figure. Find the drawing measurement if the length of the actual figure is 1.08 meters.

13. The scale of a map is $\frac{1}{2}$ inch : 24 miles .
What is the actual mileage between two cities that are 7.4 inches apart on the map?

14. On a blueprint of a house, the living room is 1 inch long. The actual length of the living room is 28 feet. What is the scale of the blueprint?

15. In the same blueprint for #14, where the living room is 1 inch long and the actual length of the living room is 28 feet, the actual width of the living room is 18 feet. What will the width be on the drawing?

16. The picture shown is a scale drawing of a collector car. The scale is 1 cm : 72 centimeters.
How tall is the actual full-sized car?



17. A freeway is 600 miles long. How long is the highway on a map using the scale 0.5 inch : 50 miles?

18. 1 inch represents 75 miles on a map, how many inches will represent 1500 miles?

19. A photo is 8 inches tall. Find the height of the resulting photo if the photo is shrunk by a scale factor of 0.75.