Name _____ Class Period _____

# Scale Factor and Scale Drawings

1. When looking at a map, the scale of the map tells us how to figure out actual distances. We do this by measuring the distance on the map, and using the scale to convert it to the actual distance. Using the map of Utah, what is the distance in miles from Dinosaur National Monument to Capital Reef National Park?

A. Measure the distance in inches.

B. Convert the inches to miles using

   The scale on the map.

Show your work here.

C. Distance is: _____
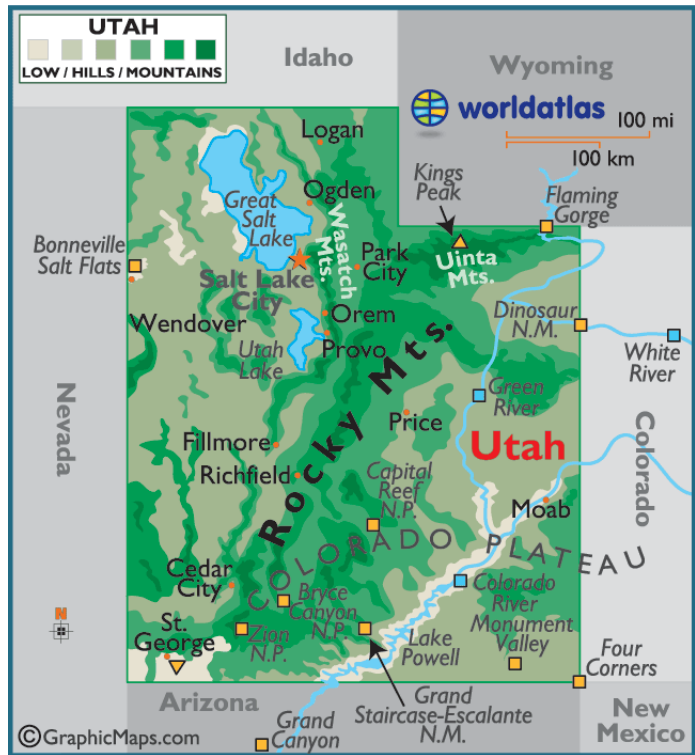
2. We can compare the ratios of the sides of the triangles to see if they are similar triangles. Check the ratios of the corresponding sides in the given triangles to see if the ratios are equal.

9   15   12
12

12   20
16
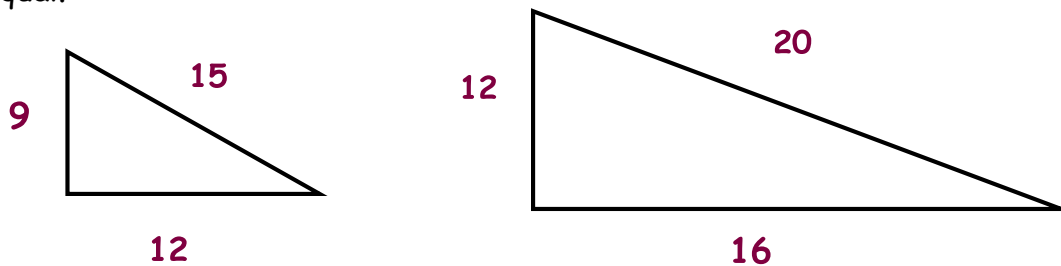
What is the scale factor from the small triangle to the large triangle? _____

What is the scale factor from the large triangle to the small triangle? _____

3. Set up the ratio of corresponding sides of the rectangles shown to find the value of x.

7   **15**

X

21

$$\frac{\ }{\ } = \frac{\ }{\ }$$
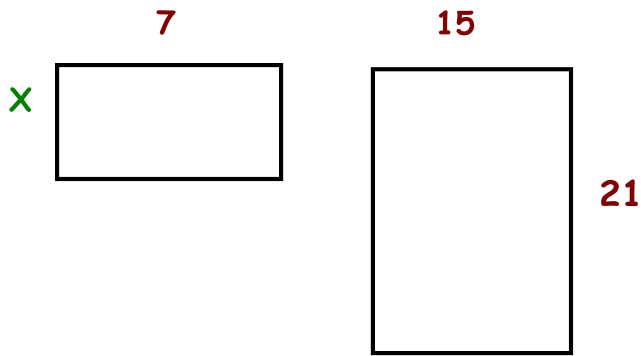
X =

What is the scale factor going from the small rectangle to the large rectangle? _____

What is the scale factor going from the large rectangle to the small rectangle? _____

4. Matchbox cars are usually made in a scale of 1:64. If a Matchbox Camaro is 3 inches long, how long is an actual Camaro? _____

5. If my model of the Statue of Liberty is 4.25 inches tall, and the actual Statue of Liberty is 305 feet tall, then what is the scale factor from the model to the actual? _____

_____

6. If my model of the Eiffel Tower is 3.625 inches tall, and the scale is 1 in = 293.2 ft. What is the actual height of the Eiffel Tower? Round your answer to the nearest foot. _____

_____

7. What is the scale factor of a model sailboat, if the scale is 1 in = 6 feet? _____