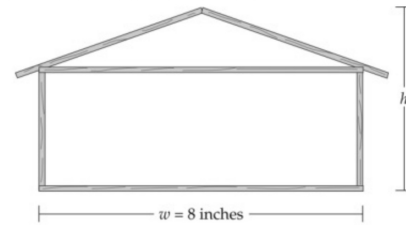**Name**_____

Hour 1 2 3 4 5 6 7

_____

Complete work on paper
Go to Edulastic via Google classroom
Enter Answers
Fix mistakes
**Use this paper to study for 4-1 Quiz**

Q1:

Derek made a model of his family home out of wooden sticks.
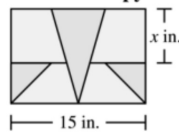
$w = 8$ inches

h

His home is 40 feet wide and $22\frac{1}{2}$ feet high. What is the height of Derek's model?

Q2:

Leonie wants to build a reduced copy of a stained-glass window. She wants the shapes in her reduced copy to be similar to the shapes in the original window. Selected dimensions of each window are shown below.
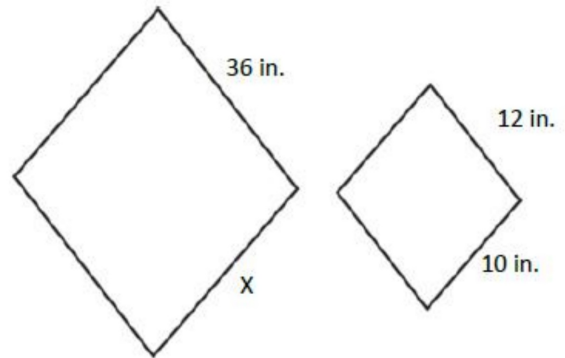
Original Window

12 in.

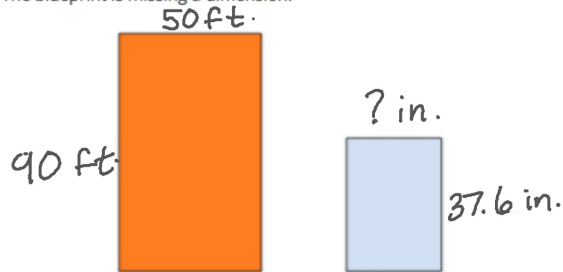30 in.

Reduced Copy

x in.

15 in.
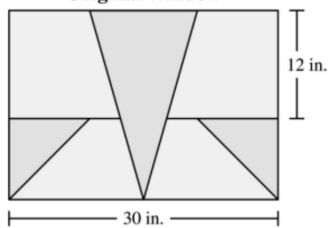
What value of x, in inches, should Leonie use for her reduced copy?

Q3: The two figures are proportional. Find the value of x.

36 in.

12 in.

10 in.

X

Q4: Thomas Jefferson School is building a new basketball court as seen below in orange.

The blueprint is missing a dimension.

50 ft.

? in.

90 ft.

37.6 in.

Note: Drawing may not be to scale

What should the width of the blueprint be?
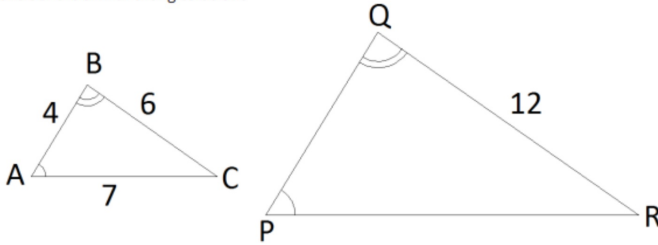

Q5: The following shapes are similar. Find the measure of the missing length g.

12 in

6 in

g

1 in
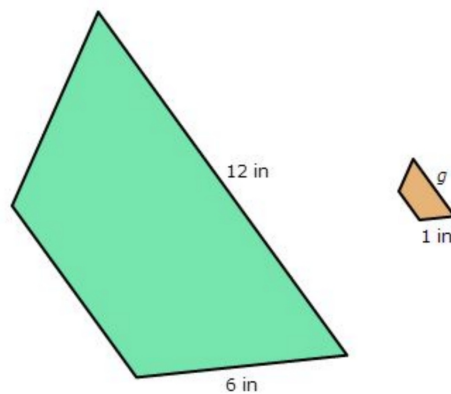
Note: Figure not drawn to scale.

Q6: Part A Triangle ABC in the original figure, Triangle PQR is the copy.

Consider the similar triangles below:

B 4 6
A 7 C

Q 12 R P

What is the scale factor? _____

What is the length of side PR?

Q7: The larger rectangle is the original figure, the smaller rectangle is the copy. Use this information to answer the questions below.

16 ft.

11 ft

8 ft

? ft

Part A

Find the scale factor.

What is the length of the side marked "?"

Q8: The scale of a model train is 1 inch to 13.5 feet. The model is 5 inches long, what is the length of the actual train?

Q9: The scale on a map is 5 cm : 8 km.
If the distance between two cities is 56 km, how far apart in cm are the two cities on the map?

Q10: On a a map, 0.25 inch between locations represents an actual distance of 2 miles. What is the actual distance, in miles, between two cities that are 3.75 inches apart on the map?

Q11: Consider the graph shown below.
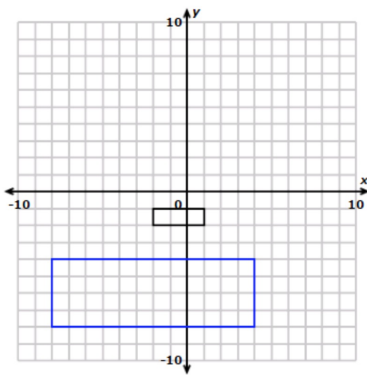
The large shape is a copy of the small shape. What is the scale factor?

What is scale factor?

How do you find a distance using a map scale?