

Name: _____

Period: _____

Date: _____

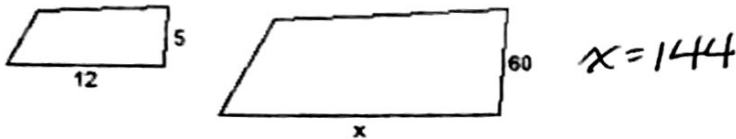
Intermediate 1

Homework 7-6
Similar Figures & Scale Factor

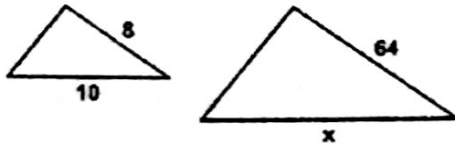
Unit 7

Find the missing side length.

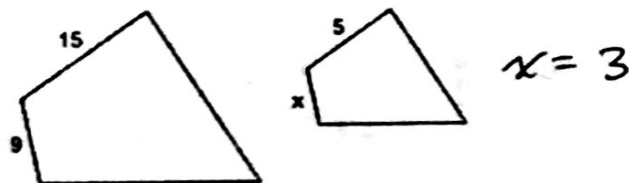
1.



2.



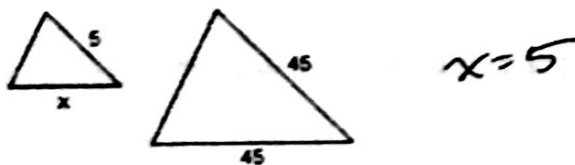
3.



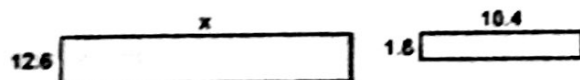
4.



5.

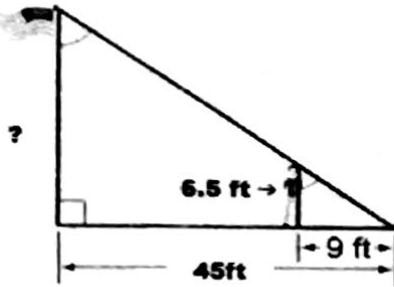


6.

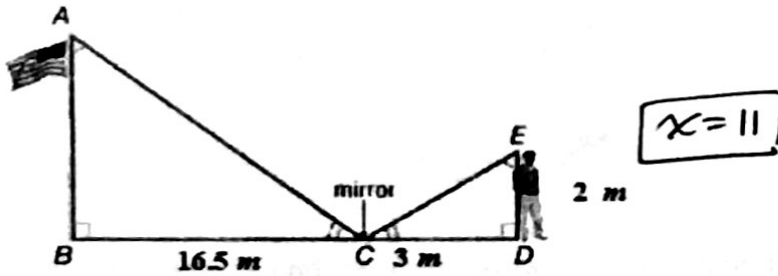


Use proportions to solve.

7. How tall is the flagpole?



8. How tall is the flagpole?



9. How tall is the tree?

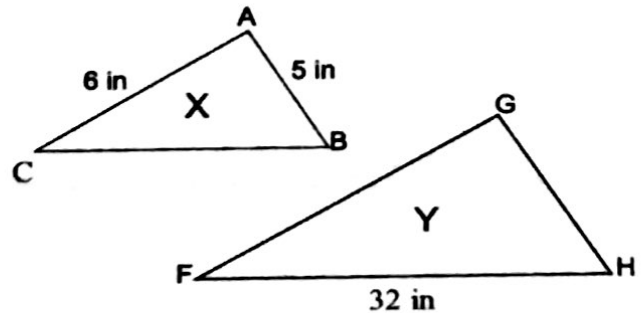


In the figure below, the scale factor from X:Y is 1:4.

10. Find the length of side GH. 20 in.

11. Find the length of side FG.

12. Find the length of side BC. 8 in.



13. Write and solve a proportion using the scale provided on the map to find the actual distance between Hagerstown and Annapolis. The distance on the map is $3\frac{1}{2}$ cm.



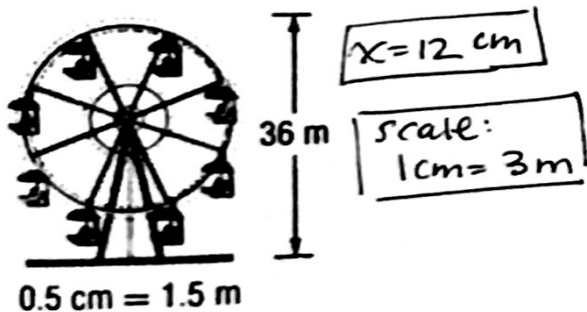
$$x = 84 \text{ miles}$$

14. Write and solve a proportion using the scale provided on the map to find the distance between Clarksville and Little Rock. The distance on the map is 4 cm.

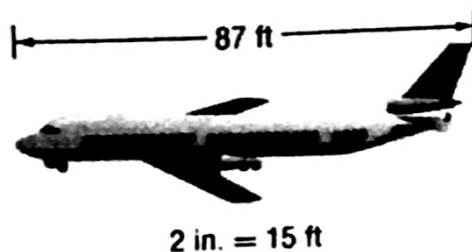


For problems 15 and 16 and the length of each model. Then, find the scale factor.

15.



16.



17. A model of a tree is made using a scale of 1 inch = 25 feet. What is the height of the actual tree if the height of the model is $4\frac{3}{8}$ inches?

18. A map of Bakersfield has a scale of 1 inch = 5 miles. If the city measures $5\frac{1}{5}$ inches on the map, what is the actual distance of the city?

$$x = 26 \text{ miles}$$