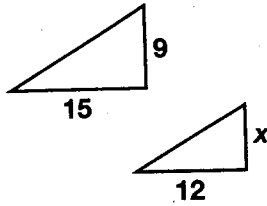


# Practice 4-2

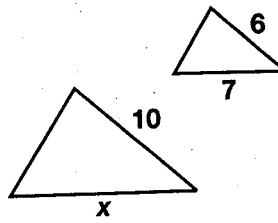
## Proportions and Similar Figures

Each pair of figures is similar. Find the length of  $x$ .

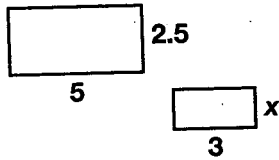
1.



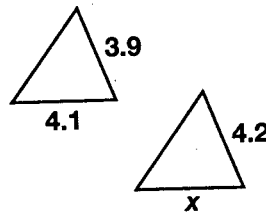
2.



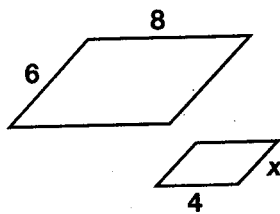
3.



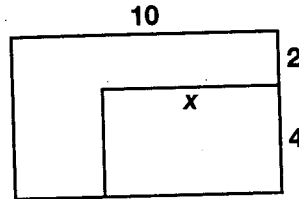
4.



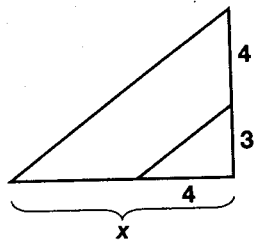
5.



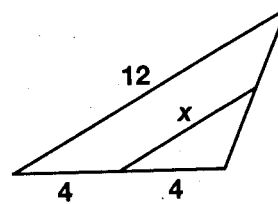
6.



7.



8.



Use a proportion to solve.

9.  $\triangle ABC$  is similar to  $\triangle XYZ$ . The length  $AB$  is 10. The length  $BC$  is 7. Find the length  $XY$  if the length  $YZ$  is 14.
10. Marty has a scale model of a car. The scale is 1 in. : 32 in. If the model is 6.75 in. long, how long is the actual car?
11. A blueprint scale is 1 in. : 12 ft. The width of a building is 48 ft. What is the width of the building on the blueprint?
12. Angie is using similar triangles to find the height of a tree. A stick that is 5 ft tall casts a shadow that is 4 ft long. The tree casts a shadow that is 22 ft long. How tall is the tree?
13.  $\triangle ABC$  is similar to  $\triangle XYZ$ . The length  $AC$  is 10. The length  $BC$  is 16. What is the length  $XZ$  if the length  $YZ$  is 12?
14. A map has a scale of 1 in. : 25 mi. Two cities are 175 mi apart. How far apart are they on the map?