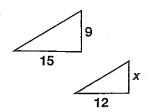
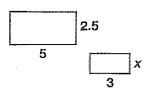
## Practice 4-2

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

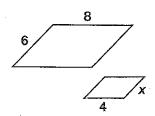
1.



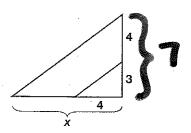
3.



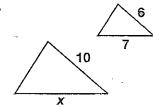
5.



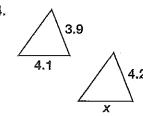
7.



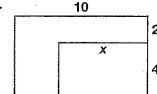
2.



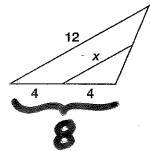
4.



6.



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.** Angle 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?