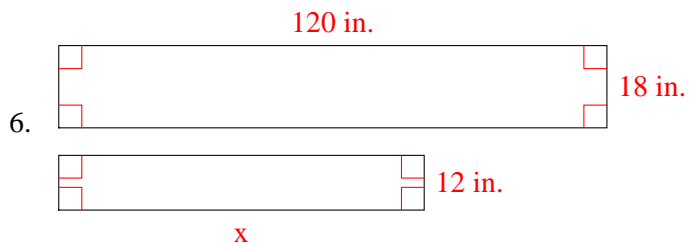
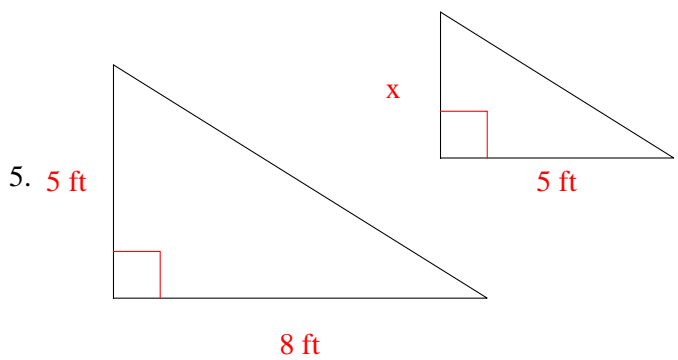


Worksheet 4.2: Proportions and Similar Figures

Fill in the blank with the appropriate word, phrase, or symbol to make a true statement.

1. Similar figures have the same _____ but not necessarily the same _____.
2. The symbol _____ means "is similar to".
3. A _____ drawing is an enlarged or reduced drawing that is similar to an actual object or place.
4. In similar triangles, corresponding _____ are congruent and corresponding _____ are in proportion.

The figures in each pair are similar. Find the missing length.



7. Two rectangles are similar. The first is 4 in. wide and 15 in. long. The second is 9 in. wide. Find the length of the second rectangle.

8. Two rectangles are similar. One is 5 cm by 12 cm. The longer side of the second rectangle is 8 cm greater than twice the shorter side. Find its length and width.

9. The scale of a map of Tennessee is 1 inch: 25 miles. If you measure the distance from from Nashville to Knoxville as 7.2 inches, approximately how far is Nashville from Knoxville?

10. A tree casts a shadow 7.5 ft long at the same time that a woman 5 ft tall casts a shadow 3 ft long. How tall is the tree?