

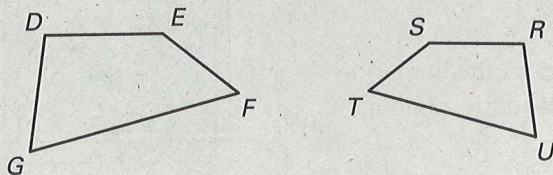
# Practice

For use with pages 287-292

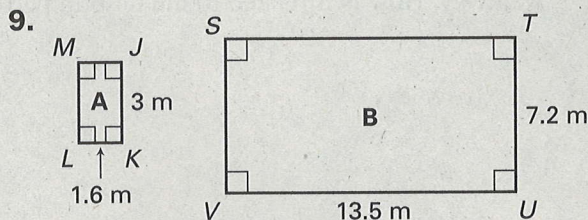
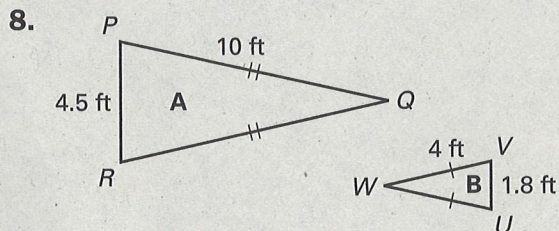
Given  $EFGH \sim JKLM$ , tell whether the statement is true or false.

1.  $\angle F$  and  $\angle J$  are corresponding angles.
2.  $\overline{GH}$  and  $\overline{LM}$  are corresponding sides.
3.  $\angle H$  and  $\angle M$  are corresponding angles.
4.  $\overline{HE}$  and  $\overline{MJ}$  are corresponding sides.
5.  $\overline{FG}$  and  $\overline{KL}$  are corresponding sides.
6.  $\angle G$  and  $\angle K$  are corresponding angles.

7. Given  $DEFG \sim RSTU$ , name the corresponding angles and the corresponding sides.



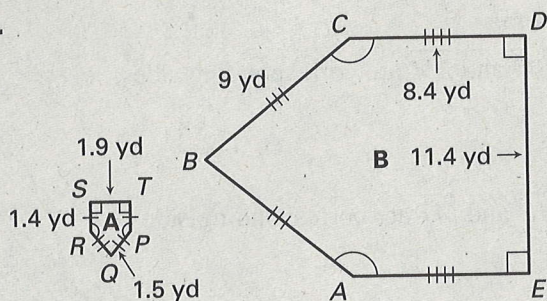
The figures are similar. Find the ratio of the lengths of the corresponding sides of figure A to figure B.



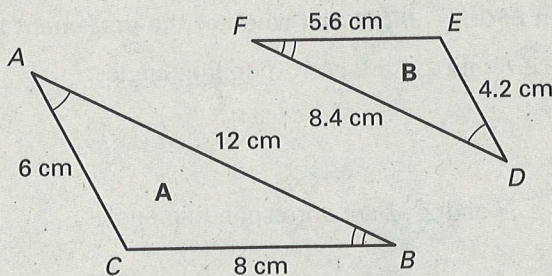
**Practice**

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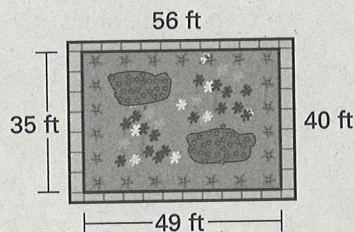
10.



11.



12. A rectangular garden is 49 feet long and 35 feet wide. The garden is bordered by a rectangular walkway that is 56 feet long and 40 feet wide as shown in the figure.



a. Is the garden area similar to the rectangle formed by the bordering walkway? If so, find the ratio of the lengths of the corresponding sides of the garden to the walkway.

b. Find the ratio of the perimeter of the garden to the perimeter of the walkway. How is it related to the ratio in part (a)?

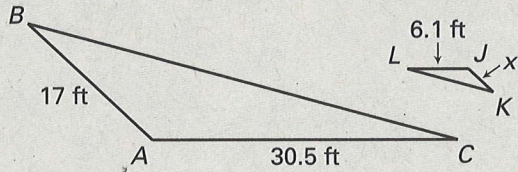
c. Find the ratio of the area of the garden to the area of the garden including the walkway.

**Practice**

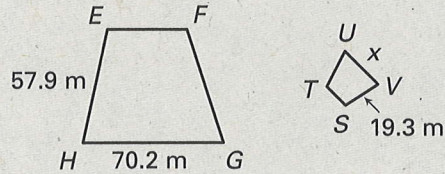
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Find the specified side length.

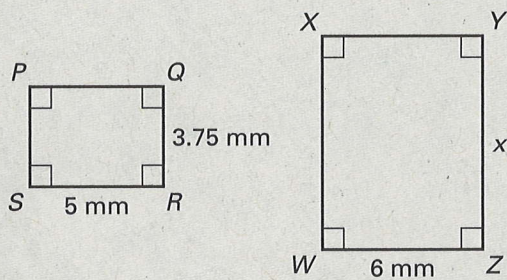
1. Given  $\triangle ABC \sim \triangle JKL$ , find  $JK$ .



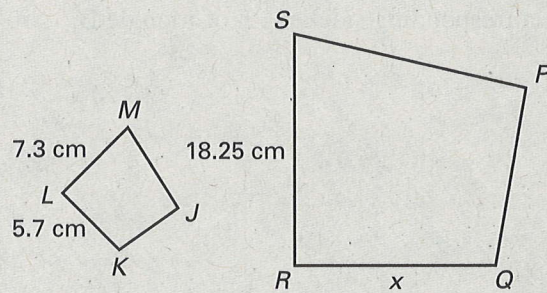
2. Given  $EFGH \sim STUV$ , find  $UV$ .



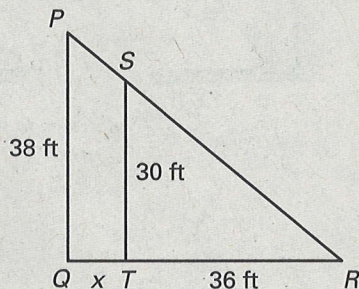
3. Given  $PQRS \sim WXYZ$ , find  $YZ$ .



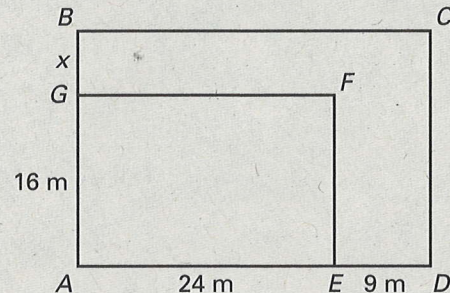
4. Given  $JKLM \sim PQRS$ , find  $QR$ .



5. Given  $\triangle PQR \sim \triangle STR$ , find  $QT$ .



6. Given  $ABCD \sim AGFE$ , find  $GB$ .



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7. The ratio of a side length of rectangle A to a corresponding side length of rectangle B is  $12 : 5$ . Rectangle A has a side length of 60 inches. Find the corresponding side length of rectangle B.

8. The ratio of a side length of triangle A to a corresponding side length of triangle B is  $5 : 8$ . Triangle A has a side length of 18 centimeters. Find the corresponding side length of triangle B.

9. A farmer who is 72 inches tall is standing beside a silo that has a height of 140 feet. The length of the silo's shadow is 31.5 feet. What is the length of the farmer's shadow?

