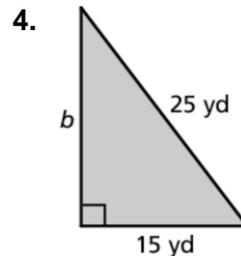
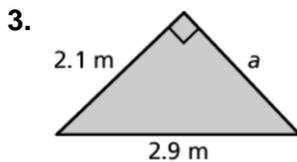
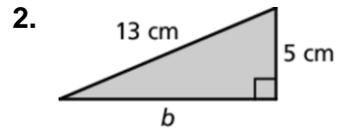
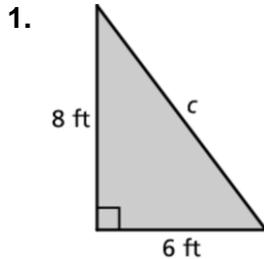


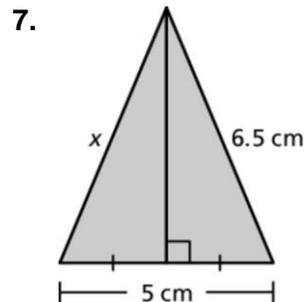
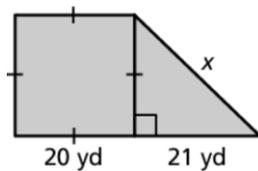
## 7.3 Practice A

Find the missing length of the triangle.



5. A small shelf sits on two braces that are in the shape of a right triangle. The leg (brace) attached to the wall is 4.5 inches and the hypotenuse is 7.5 inches. The leg holding the shelf is the same length as the width of the shelf. What is the width of the shelf?

Find the missing length of the figure.

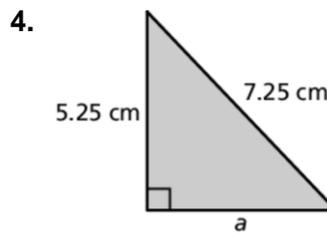
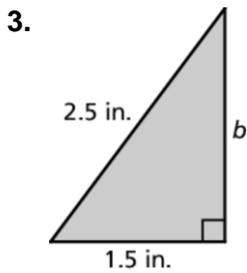
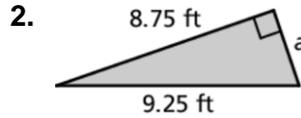
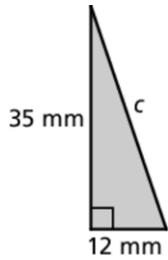


8. Can a right triangle have a leg that is 10 meters long and a hypotenuse that is 10 meters long? Explain.
9. One leg of a right triangular piece of land has a length of 24 yards. The hypotenuse has a length of 74 yards. The other leg has a length of  $10x$  yards. What is the value of  $x$ ?

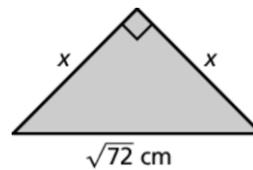
# 7.3

## Practice B

Find the missing length of the triangle.



- You built braces in the shape of a right triangle to hold your surfboard. The leg (brace) attached to the wall is 10 inches and your surfboard sits on a leg that is 24 inches. What is the length of the hypotenuse that completes the right triangle?
- Laptops are advertised by the lengths of the diagonals of the screen. You purchase a 15-inch laptop and the width of the screen is 12 inches. What is the height of its screen?
- In a right isosceles triangle, the lengths of both legs are equal. For the given isosceles triangle, what is the value of  $x$ ?



- To get from your house to your school, you ride your bicycle 6 blocks west and 8 blocks north. A new road is being built that will go directly from your house to your school, creating a right triangle. When you take the new road to school, how many fewer blocks will you be riding to school and back?

