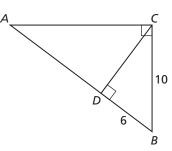
## **Practice B**

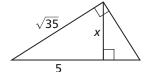
In Exercises 1-3, use the diagram.

- 1. Identify the similar triangles.
- 2. Which segment's length is the geometric mean of AB and DB?
- **3.** Find CD, AD, and AC.

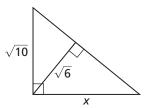


In Exercises 4–6, find the value of x.





6.



In Exercises 7–9, find the geometric mean of the two numbers.

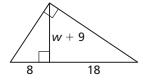
**7.** 12 and 24

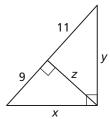
**8.** 16 and 25

**9.**  $\frac{1}{2}$  and 40

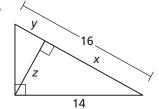
In Exercises 10-12, find the value(s) of the variable(s).

10.





12.



**13.** You build a cornhole game. The game is constructed from a sheet of plywood supported by two boards. The two boards form a right angle and their lengths are 12 inches and 46.5 inches.



- **a.** Find the length x of the plywood to the nearest inch.
- **b.** You put in a support that is altitude y to the hypotenuse of the right triangle. What is the length of the support? Round your answer to the nearest tenth.
- **c.** Where does the support attach to the plywood? Explain.