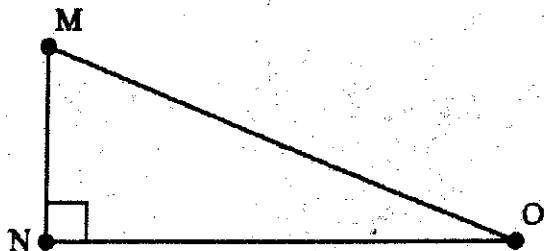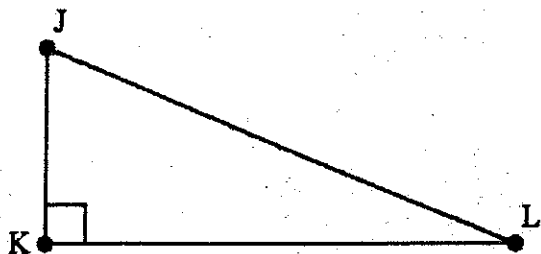# Pythagorean Theorem Quiz

Multiple Choice
Identify the choice that best completes the statement or answers the question.

___ 1. **Which line segment represents the hypotenuse?**
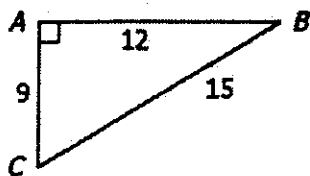

a. $\overline{MN}$ b. $\overline{MO}$ c. $\overline{NO}$

___ 2. **Which two line segments represent the legs?**
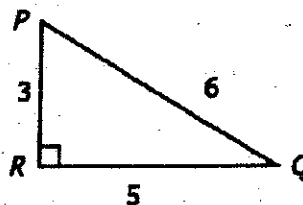

a. $\overline{JL}$ and $\overline{JK}$ b. $\overline{KL}$ and $\overline{JL}$ c. $\overline{JK}$ and $\overline{KL}$

___ 3. **Using the Pythagorean Theorem, determine whether the following measurements form a right triangle.**

a. No, it's not a right   b. Yes, it's a right
    triangle.   triangle.

___ 4. **Using the Pythagorean Theorem, determine whether the following measurements form a right triangle.**

a. No, it's not a right   b. Yes, it's a right
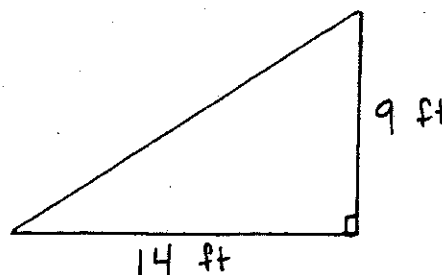   triangle.   triangle.

___ 5.

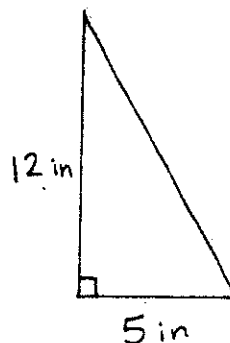**Which of the following measurements form a right triangle?**

a. 4cm, 6cm, 10cm   c. 5cm, 12cm, 169cm

b. 7cm, 9cm, 65cm   d. 10cm, 24cm, 26cm

Solve to find the length of the hypotenuse. (Round to the nearest tenth, if necessary.)
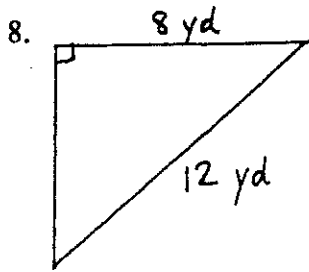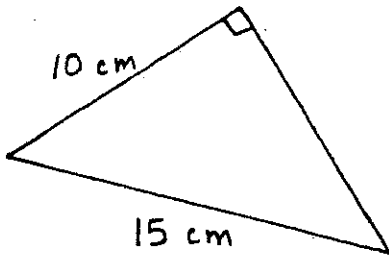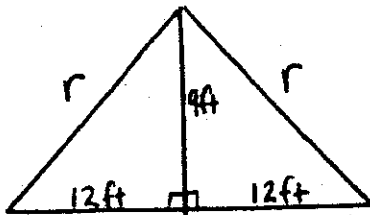
6.

7.

Solve to find the length of the missing leg. (Round to the nearest tenth, if necessary.)

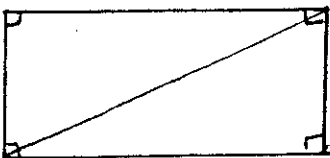**Find the distance between each pair of points.**

8.

8 yd

12 yd

12.

(5, 4)

(1, 2)

9.

10 cm

15 cm

13. (-2, -3), (5, 4)

10. Below is a diagram of two rafters on a house. How long is each rafter?
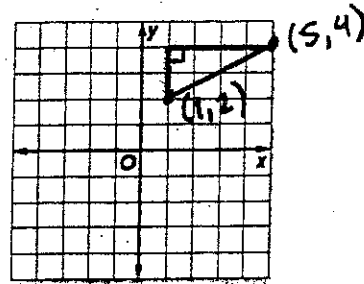
r   r

9ft

12ft   12ft

14. (-3, 0), (4, 1)

11. A rectangular room has a length of 15 feet and a width of 20 feet. Find the length of the diagonal of the room. (Round to the nearest tenth.)
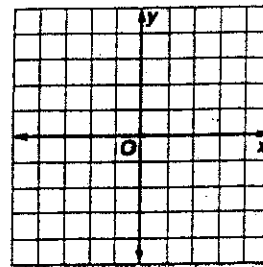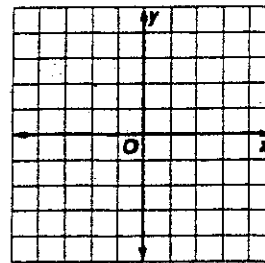
15. List all of the perfect squares from 0-100.

16. Between what *two whole consecutive* numbers does the $\sqrt{38}$ lie?