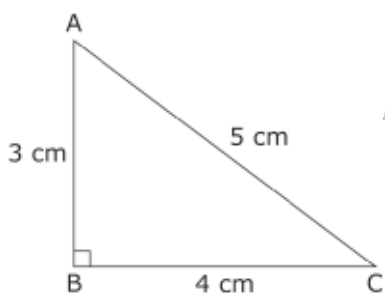


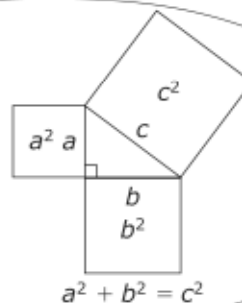
The 3–4–5 Method of Checking for a 90° Angle

This page provides extra practice for the Skills Practice on page 240.

A triangle with a 90° angle has a special property.



A 3–4–5 triangle is an example of a triangle that fits Pythagoras's model.



$$\begin{array}{lcl}
 \text{AB is 3 cm.} & 3^2 = 9 & \\
 \text{BC is 4 cm.} & 4^2 = 16 & \left. \vphantom{\begin{array}{l} 3^2 = 9 \\ 4^2 = 16 \end{array}} \right\} 9 + 16 = 25 \\
 \text{AC is 5 cm.} & 5^2 = 25 &
 \end{array}$$

- When the sum of the areas of the squares on the short sides equals the area of the square on the long side, the triangle has a 90° angle.

1. Measure the length of each side of these triangles. Which of these triangles has a 90° angle? How do you know?

