# 7.5

# CONVERSE OF THE PYTHAGOREAN THEOREM

## The Converse of the Pythagorean Theorem

If it has 3 sides, then it is a triangle.

==Converse==

If _____, then _____.

If it is a right triangle, then $a^2+b^2=c^2$ works.

If _____, then _____.

# The Converse of the Pythagorean Theorem

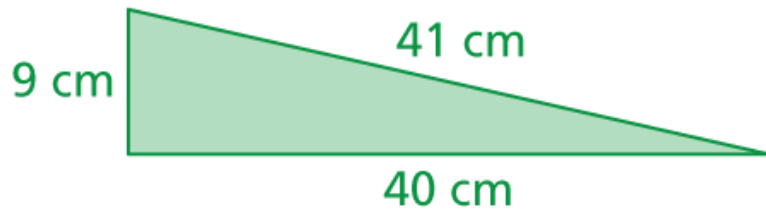In a triangle if $a^2 + b^2 = c^2$ works , then the triangle is

a _____.

**Determine if the triangle with the given side lengths is a right triangle.**
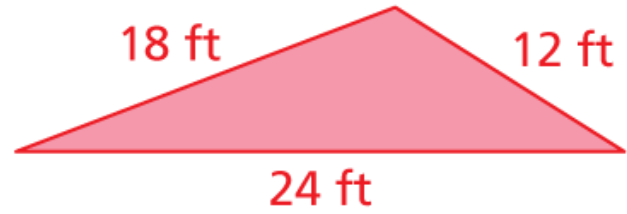
1)  $11, 18, 21$

2)  $5, 6, \sqrt{11}$

**Tell whether each triangle is a right triangle.**

**a.**

9 cm

41 cm

40 cm

**b.**

18 ft

12 ft

24 ft

**Determine if the triangle with the given side lengths is a right triangle.**

c.  Triangle with sides 9, 7, 10

d.  Triangle with sides 10, 6, 13

e.  Triangle with sides 13, 5, 12