7.5

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.

41 cm
9 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