Name _____
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What Is The Converse Of The Pythagorean Theorem?

The Pythagorean Theorem

If a triangle is a right triangle, then the sum of the squares of the lengths of the legs is equal to the square of the length of the hypotenuse.

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

The Converse Of The Pythagorean Theorem

If the sum of the squares of the lengths of the legs of a triangle is equal to the square of the length of the hypotenuse, then the triangle is a right triangle.

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

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*The converse of the Pythagorean Theorem can be used to prove if a triangle is a **right triangle.***

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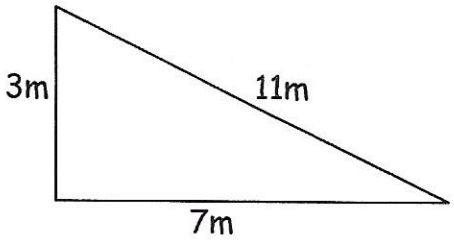
1) Using the Pythagorean Theorem, show that a triangle with sides of length 10, 8, and 6 units is a right triangle.

2) Determine whether the triangle with sides of lengths 9cm, 12cm, and 16cm is a right triangle.

3) Is the following triangle a right triangle? Explain.



4) Using the Pythagorean Theorem, determine if the following triangle is a right triangle.