

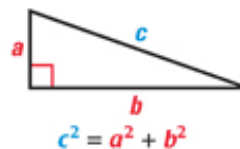
Honors Geometry

Notes Section 7.1

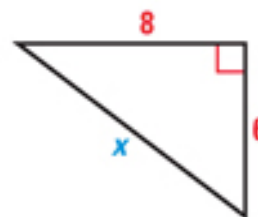
Apply the Pythagorean Theorem

THEOREM 7.1 Pythagorean Theorem

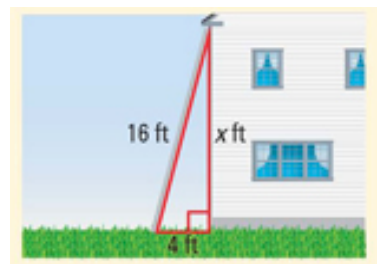
In a right triangle, the square of the length of the hypotenuse is equal to the sum of the squares of the lengths of the legs.



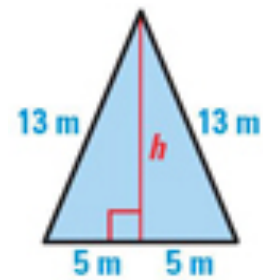
EXAMPLE 1 Find the length of the hypotenuse.



EXAMPLE 2 A 16 foot ladder rests against the side of the house, and the base of the ladder is 4 feet away. **Approximately how high above the ground is the top of the ladder?**



EXAMPLE 3 Find the area of the isosceles triangle with side lengths 10m, 13m & 13m.



EXAMPLE 4 Find the length of the hypotenuse of the right triangle.

