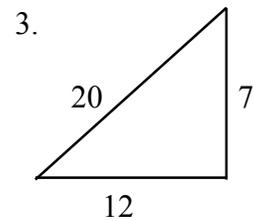
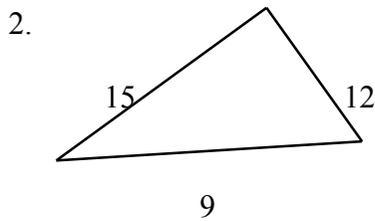
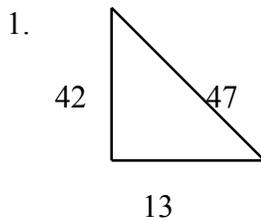


Right Triangle Theorem

A. Determine whether or not the following are right triangles:



4. Having dimensions 16, 30 and 34
5. Having dimensions 35, 33, 2
6. Having dimensions 10, 12, 20

B. Problem solving:

1. A building lot is in the shape of a right triangle. One side (not the hypotenuse) of the lot borders along a sidewalk and it is 16.8 m long. The hypotenuse is 23.52 m long. The third side is perpendicular to the sidewalk. Find its length.
2. A section of flooring is to be carpeted is in the shape of a right triangle. One side of the floor is 6.0 m long. The hypotenuse is 8.4 m long. Determine the length of the third side of the floor.
3. A house sits on a lot that is in the shape of a right triangle. One side of the lot borders along main street of town, and that side of the is 11.0 m. The other side is 15.4 m long. Find the length of the hypotenuse.
4. The sail of Jan's model sail boat is in the shape of a right triangle. The horizontal side of the sail is 56.30 cm long. The hypotenuse is 78.80 cm long. Find the length of the vertical side of the sail.
5. A section of farm to be plowed is in the shape of a right triangle. One side of the farm is 48.6 m long. The hypotenuse is 68.00 m long. Determine the length of the third side of the farm.
6. A 8.2 m ladder is resting against a wall. If the wall is 7.5 m high, how far from away from the wall is the ladder?
7. John wants to paint the top of a statue that is 14 m high. If the ladder is to be placed 5 m from the base of the statue, how long is the ladder?