

## The Triangle and its Properties

## Topic: Pythagoras Theorem

Name: Date: 

1. A ladder is placed in such a way that its foot is at a distance of 5 m from a wall and its top reaches a window 12 m above the ground. Determine the length of the ladder.

 m

2. A ladder 25 m long reaches a window of a building 20 m above the ground. Determine the distance of the foot of the ladder from the building.

 m

3. The hypotenuse of a triangle is 2.5 cm. If one of the sides is 1.5 cm. Find the length of the other side.

 cm

4. A man goes 15 m due west and then 8 m due north. How far is he from the starting point?

 m

5. The two legs of a right triangle are equal and the square of the hypotenuse is 50. Find the length of each leg.

 units

6. In right  $\triangle ABC$ ,  $a=6\text{cm}$ ,  $b=8\text{cm}$ . Find the length of the hypotenuse

 cm

Verity that the following numbers represent Pythagorean triplet: (Answer in Yes/No)

7. 12, 35, 37 8. 7, 24, 25 9. 27, 36, 45 10. 15, 36, 39 