

Using the Pythagorean Theorem*Solve. Round answers to the nearest tenth.*

1. Find the hypotenuse of a right triangle in which the lengths of the other two sides are 5 meters and 12 meters.
2. The hypotenuse of a right triangle is 20 meters and one leg is 16 meters. Find the length of the other leg.
3. A rectangle has an altitude of 4 inches and a diagonal of 10 inches. What is the length of the base?
4. The diagonal of a rectangle is 13 inches. One side is 12 inches. Find the length of the other side.
5. Mindy and Christine started from the same point. Christine traveled west at a rate of 30 miles per hour. Mindy traveled south at a rate of 40 miles per hour. How far apart were they at the end of one hour?
6. A ladder 39 feet long leans against a building. It reaches the ledge of a window. If the foot of the ladder is 15 feet from the foot of the building, how high is the window ledge above the ground?
7. A ship is 24 miles east of port. How far north must the ship sail to reach a point that is 25 miles from port?
8. The foot of a 12-foot ladder was placed 4 feet from a building. What height on the building does the top of the ladder reach?