

Name _____

Date _____

Right Triangles
The Pythagorean Theorem
Independent Practice

1. Tony wants his white picket fence row to have ivy grow in a certain direction. He decides to run a metal wire diagonally from the ground level at one end to the top of the other side of the fence row. The section of the fence in the front of his house is 10 feet long and has a height of 27 inches.

Determine the length of the wire.

2. Alice leaves her house and walks to school. She walks 45 meters south and 336 meters east. How far is Alice from her house?

3. The walls of square storage room in a warehouse are 300 feet long. What is the distance from one corner to the other corner of the storage room?



4. Alejandro has three ladders that are 15, 10, and 12 feet in length. If he is trying to reach a window that is 8 feet from the ground, then...

Part A: How far does the bottom of the ladder need to be for the 15-foot ladder?

Part B: How far does the bottom of the ladder need to be for the 10-foot ladder?

Part C: How far does the bottom of the ladder need to be for the 12-foot ladder?

5. If the hypotenuse of a right triangle is 125 units long and the short leg adjacent to the right angle is 32 units long, then determine the length of the long leg of the triangle.

