Unit 3 Lesson 13 – Pythagorean Theorem Word Problems

1.) If a 12 foot ladder is placed so that the bottom of the ladder is 3 feet from the wall, then how far up the wall will the ladder reach?

2.) A rectangular soccer field is 90 meters wide and 120 meters long. If the coach asks the players to run from one corner to the corner diagonally across the field, then how far do the players run?

3.) A right triangle has a hypotenuse with a length of 13 inches and a leg with a length of 4 inches. What is the length of the other leg?

4.) You have a 15-foot ladder and need to reach exactly 9 feet up the wall. How far away from the wall should you place the ladder so that you can reach your desired location?

5.) A rectangle has dimensions 6 inches by 12 inches. What is the length of the diagonal of the rectangle?

6.) The diagonal of a rectangle is 25 in. The width is 15 in. What is the length of the rectangle?

7.) A baseball diamond is a square that is 90 feet on each side. If a player throws the ball from 2nd base to home, then how far will the ball travel?

8.) If a right triangle has a leg with a length of 10 inches and another leg with a length of 4 inches, then what is the length of the hypotenuse of the triangle?