Unit 5 Day 1 HW
Solve for the missing side by using Pythagorean Theorem. Leave answers in simplest radical form.


Solve each of the following. Please draw a picture and use the Pythagorean Theorem to solve.
7. The bottom of a ladder must be placed 3 feet from a wall. The ladder is 12 feet long. How far above the ground does the ladder touch the wall?
8. A soccer field is a rectangle 90 meters wide and 120 meters long. The coach asks players to run from one corner to the corner diagonally across the field. How far do the players run?
9. How far from the base of the house do you need to place a $15^{\prime}$ ladder so that it exactly reaches the top of a $12^{\prime}$ wall?
10. A baseball diamond is a square that is $90^{\circ}$ on each side. If a player throws the ball from $2^{\text {nd }}$ base to home, how far will the ball travel?

Solve for the missing side by using pythagorean theorem.

16.

17. Michael is walking around a crater in the center of Heroville. The crater is 5 km long and 7 miles wide.
a. How far would Michael have to walk to walk from one corner of the crater to the opposite corner of the crater along the outside of the crater?
b. Captain Pythagoras has the ability to fly. How far would Captain Pythagoras fly if he were to fly from one corner of the crater to the opposite corner of the crater?

