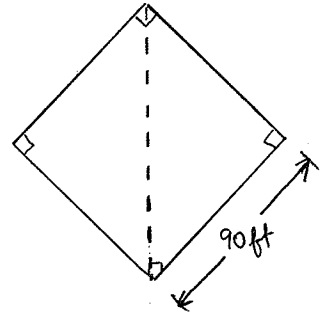


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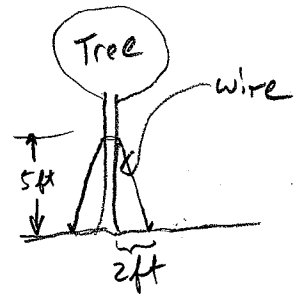
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Worksheet 7.12: Pythagorean Theorem Applications

- 1) A baseball diamond is a square with 90 ft sides. What is the distance that a catcher has to throw from home to second base?



- 2) You are working for a landscaping company and you must plant and stake a tree. The stakes must be 2 ft from the base of the tree and the wires must extend 5 ft up the trunk. How long will the wires be?



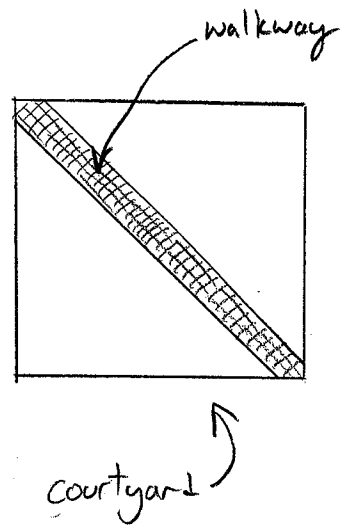
- 3) A ladder is 6 ft away from the base of a building. The ladder is 18 ft long. How many feet above the ground is the top of the ladder?

over →

4) A square courtyard with a diagonal walkway has an area of 81 sq. ft.

a) Find the length of the sides of the courtyard.

b) Find the length of the walkway.



5) A hiker goes 3 miles north, then 4 miles east. How far is he from his original location?

6) A diver swims out 20 ft from her boat. She is connected to the boat by a cable. To dive straight down 50 ft, how long does the cable have to be?

