Name: _____ Date: _____ Period: ___

Pythagorean Theorem Word Problems #1

Word Problems. Draw a picture first, { Use the Pythagorean Theorem to solve. *Show all work.*

1. A wire is stretched from the top of an 8-ft pole to a bracket 5 ft. from the base of the pole. How long is the wire?

2. A helicopter rose vertically 300 m and then flew west 400 m. How far was the helicopter from it starting point?

3. A newly-planted tree needs to be staked with three wires. Each wire is attached to the trunk 3 ft. above the ground, and then anchored to the ground 4 ft. from the base of the tree. How much wire is needed?
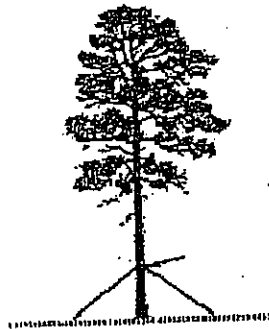

4. A park is in the shape of a rectangle 8 miles long and 6 miles wide. How much shorter is your walk if you walk diagonally across the park than along two sides of it?

5. The bases on a softball diamond are 60 feet apart. How far is it from home plate to second base?

6. Anna has let out 50 meters of kite string when she observes that her kite is directly above Emily. If Anna is 35 meters from Emily, how high is the kite?
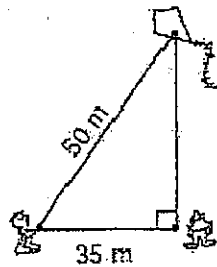
7. What is the height of the parallelogram?
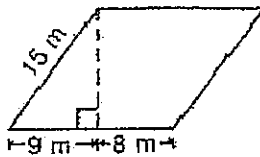
8. What is the area of the parallelogram in question 7?

9. A lifeguard spots a drowning swimmer 40 ft. from the beach. She runs 90 ft. along the beach at a speed of 15 feet per second, then jumps in the water and swims straight to the swimmer at a speed of 5 feet per second. How long does it take her to reach the swimmer?