Pythagorean Theorem Word Problems

1) The foot of a ladder is placed 6 feet from a wall. If the top of the ladder rests 8 feet up on the wall, how long is the ladder?

2) Donna's TV screen is 20 inches long. If the diagonal measures 25 inches, how long is the width of Donna's TV?

3) Town A is 9 miles ~~from~~ North of town B, and 12 miles ~~from~~ East of town C. A road connects towns B and C directly. Find the length of this road.

4) An oak tree is 8 meters tall and a bird is standing on the ground 6 meters from the tree. If the bird flies directly to the top of the tree, how far will it fly?

5) Victor measured the floor of his storage unit, which is rectangular. It is 8 feet wide and 17 feet from one corner to opposite corner. How long is the storage unit?

6) A windowpane is 5 inches by 12 inches. What is the distance between opposite corners of the windowpane?

7) Wade is attending a school orchestra concert. He sees his math teacher seated 8 feet ahead of him and his science teacher seated 15 feet to his right. How far apart are the two teachers?

8) After school, Christian skateboards directly from school to an ice cream parlor and then from the ice cream parlor to a candy store. The ice cream parlor is 3 miles south of the school and the candy store is 4 miles east of the ice cream parlor. What is the straight-line distance between the school and the candy store?

9) Crystal is building a slide for her kids. The ladder stands vertically and is 6 feet tall and the slide is 10 feet long. What is the distance between the ladder and the bottom of the slide?

10) A slide is 10 feet long and 8 feet high. How long is its base, from the bottom of the ladder to the end of the slide?