Pythagorean theorem worksheet

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

2) Three baseball players are playing catch. Monica is 8 meters south of Brody and 6 meters west of Sadie. How far does Brody need to throw the ball to get it to Sadie?

3) Ms. Green tells you that a right triangle has a hypotenuse of 13 and a leg of 5. She asks you to find the other leg of the triangle. What is your answer?

4) Two joggers run 8 miles north and then 5 miles west. What is the shortest distance, to the nearest tenth of a mile, they must travel to return to their starting point?

5) Oscar's dog house is shaped like a tent. The slanted sides are both 5 feet long and the bottom of the house is 6 feet across. What is the height of his dog house, in feet, at its tallest point?

6) To get from point A to point B you must avoid walking through a pond. To avoid the pond, you must walk 34 meters south and 41 meters east. To the nearest meter, how many meters would be saved if it were possible to walk through the pond?

7) A suitcase measures 24 inches long and the diagonal is 30 inches long. How much material is needed to cover one side of the suitcase?

8) Lila takes a rectangular piece of fabric and makes a diagonal cut from one corner to the opposite corner. The cut she makes is 20 centimeters long and the width of the fabric is 12 centimeters. What is the fabric's length?

9) A tree broke from a point but did not separate. Its top touched the ground at a distance of 24 m from its base. If the point where it broke is at the height of 7 m from the ground, what is the total height of the tree?

Answers

1. 46 ft
2. 10m
3. 12
4. 9.4
5. 4 ft
6. 53
7. 18 in
8. 16 cm
9. 32 m