Name _____ Class _____

Pythagorean Theorem Story Problems Worksheet

Use the Pythagorean Theorem to solve each problem.

1. Jan and her brother Mel go to different schools. Jan goes 6 kilometers east from home. Mel goes 8 kilometers north. How many kilometers apart are their schools?

2. A glider flies 8 miles south from the airport and then 15 miles east. Then it flies in a straight line back to the airport. What was the distance of the glider's last leg back to the airport?

3. A 20-ft ladder is leaning against a house. The bottom of the ladder is 3 ft from the house. To the nearest tenth of a foot, about how high does the top of the ladder reach?

4. A ladder is placed 4 feet from the base of a building. The ladder reaches a height of 12 feet. What is the length of the ladder? Round your answer to the nearest tenth.

5. Maria left her house and walked 2 miles north. Then she turned and walked 3 miles west. How far is Maria from her house? Round your answer to the nearest tenth.

6. A rectangular patio has a diagonal walkway. The length of one side of the patio is 9 meters long. The length of the other side of the patio is 12 meters long? How long is the walkway? Round your answer to the nearest tenth.

Name _____ Class _____

7. The length of a rectangular swimming pool is 50 feet. The width of the pool is 20 feet. What is the length of the diagonal of the pool? Round your answer to the nearest tenth.

8. A map is placed on a coordinate grid. Cincinnati located at (5, 4) and San Diego is located at (–10, –3). How far apart is Cincinnati from San Diego on the map? Round your answer to the nearest tenth.

9. A rectangular picture from has a length of 7 inches and a width of 5 inches. What is the length of the diagonal of the picture frame? Round your answer to the nearest tenth.

10. Cities A, B, and C form a right triangle. City A is 13 miles from City B. City B is 19 miles from City C. The distance between City A and City C is represented by the hypotenuse. What is the distance between City A and City C? Round your answer to the nearest tenth.