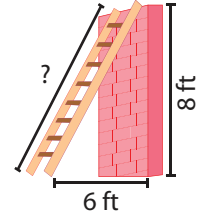


# Pythagorean Theorem | Word Problems

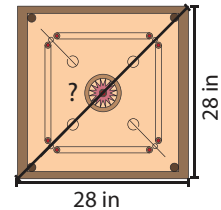
Solve the word problems. Round your answer to the nearest tenth.

- 1) Dan secures a ladder firmly to the wall to dust a photo frame mounted on the wall. The foot of the ladder is placed 6 feet from the wall. If the top of the ladder rests 8 feet up the wall, what is the length of the ladder?



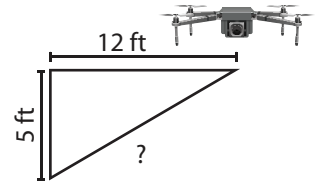
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- 2) If the playing surface of a carom board is a square of length 28 inches, what is the diagonal length of the playing surface?



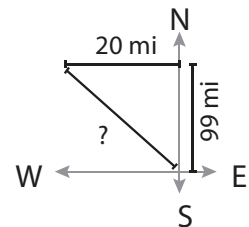
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- 3) Carlos flies his drone 5 feet above the ground. He rotates the drone to the right. So far, the drone has flown a total of 12 feet. How far is the drone from the start point?



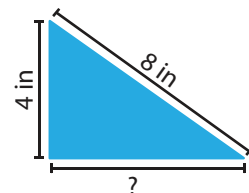
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- 4) A ship is on its maiden voyage to the mystery island. According to the map, it has to travel 99 miles to the north and then, 20 miles to the west to reach the island. Find the shortest route that leads to the mystery island.



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- 5) For her boat model, Dahlia cut a piece of fabric in the shape of a right triangle. If the length of the longest side was 8 inches and one of other two sides measured 4 inches, what was the length of the other side?



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