

- 1) Find the length of the hypotenuse of a right triangle, if one leg is 15 and the other leg is 8.

- 2) The legs of a right triangle have lengths a and b . The hypotenuse has length c . Find the unknown length for each triangle.
(a) $b = 18$, $c = 82$ (b) $a = 12$, $c = 37$

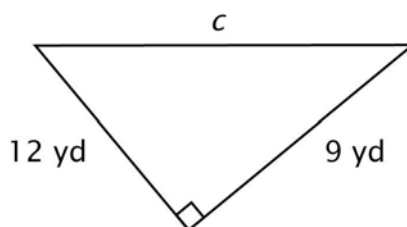
- 3) The measures of three sides of a triangle are 9, 16, and 20. Determine whether the triangle is a right triangle. Explain your answer.

- 4) The size of a television screen is given by the length of the diagonal of the screen. What size is a television screen that is 21.6 inches wide and 16.2 inches high?

- 5) If the diagonal of a rectangle measures 60 inches and one side measures 48 inches, what is the length of the other side of the rectangle?

- 6) A disabled ship radios to shore for help. The Coast Guard determines that the ship is 16 miles east and 43 miles north of the station. What is the direct distance between the ship and the Coast Guard station? Round answer to the nearest whole number.

- 7) Find the missing side of the triangle.



- 8) Tara leaned a 17 foot ladder against the house. The bottom of the ladder is 8 feet from the house. How high up the side of the house is the top of the ladder?

