

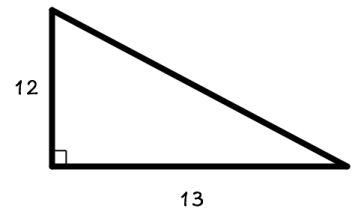
Name: _____

Date: _____

Quiz name: **Pythagorean Theorem**

1. Find the missing side.

- (A) 5
- (B) 13
- (C) 17.7
- (D) 17



2. If walking straight across a lot is 130 feet, one side of the parking lot is 120 feet, what is the length of the other side?

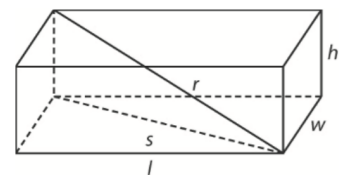
- (A) 50
- (B) 130
- (C) 177
- (D) 170

3. An isosceles right triangle has legs that are 5 inches long. How long is the hypotenuse (rounded to the nearest whole number)?

- (A) 5
- (B) 7
- (C) 7.1
- (D) 8
- (E) 7.07107

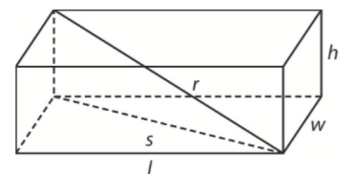
4. The box is 12 centimeters long, 5 centimeters wide, and 5 centimeters tall. What is the length of diagonal s on the bottom side?

- (A) 5
- (B) 12
- (C) 13
- (D) 17



5. The box is 12 centimeters long, 5 centimeters wide, and 5 centimeters tall. What is the length of diagonal r ?

- (A) 5
- (B) 12
- (C) 13
- (D) 14
- (E) 17



6. Which set of three numbers can be used to form the sides of a right triangle?

- (A) 51, 41, 92
- (B) 51, 61, 71

- (C) 51, 69, 99
- (D) 51, 68, 85

7. Why can a triangle with lengths 10 feet, 60 feet, 65 feet not be a right triangle?

- (A) $10 + 60$ is greater than 65
- (B) $65 - 60$ does not equal 10.
- (C) $10^2 + 60^2$ does not equal 65^2 .
- (D) $(10 + 60)^2$ does not equal 65^2

8. What is the distance between (2, 7) and (14, 12)?

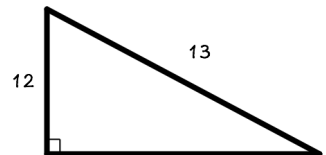
- (A) 11.5
- (B) 12.2
- (C) 13
- (D) 13.3
- (E) 18.4

9. Express 314 billion in scientific notation.

- (A) 3.14×10^8
- (B) 3.14×10^9
- (C) 3.14×10^{11}
- (D) 3.14×10^{12}

10. What is the length of the missing side?

- (A) 17.7
- (B) 5
- (C) 12
- (D) 1



11. A right triangle has legs of lengths 4 and 5. What is the length of the hypotenuse to the nearest tenth?

12. A carpenter installs a brace from the top of an 8 foot wall to a point 6 feet from the wall. How long (in feet) is the brace?

13. A child is flying a kite and has let out all 80 feet of the kite's string. The kite is 35 feet above a stop sign. How far is the child from the stop sign to the nearest foot?

14. Find the slope of the line through $(1, 1)$ and $(5, 4)$
