

1. Between which two consecutive integers is  $\sqrt{18}$ ?      2. Between which two consecutive integers is  $\sqrt{59}$ ?

**Simplify:**

3.  $\sqrt{121}$       4.  $\sqrt{68+13}$       5.  $-\sqrt{100}$       6.  $\sqrt{-64}$       7.  $-\sqrt{64}$       8.  $\sqrt{\frac{16}{25}}$       9.  $\frac{\sqrt{1}}{\sqrt{4}}$       10.  $\sqrt[3]{1331}$

11. What is the slope the given line:  $3x + 2y = 8$

**SOLVE:**

12.  $5x + 6 = 5x - 3$       13.  $4(x - 4) = 4x - 16$       14.  $5 + 8 = \frac{x}{4} + 15$

15. What is the complement of  $62^\circ$ ?

16. What is the supplement of  $45^\circ$ ?

17. What is the length of the side of a square that has an area of  $121 \text{ cm}^2$ ? What is the perimeter of the square?

18. Place the following in order from least to greatest:  $1, \sqrt{2}, 3, \sqrt{4}, \sqrt{5}$

**In #20-29, determine if the numbers are rational or irrational**

19. 0.16      20. .272727...      21. .375      22. .48732...      23. 1.232332333...

24. 1.232232223      25.  $\sqrt{25}$       26.  $\sqrt{37}$       27.  $2\pi$       28.  $\frac{3}{4}$

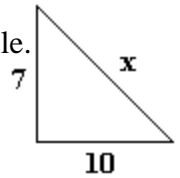
29. What is  $\sqrt{42}$  rounded to the nearest *tenth*?      30. What is  $\sqrt[3]{42}$  rounded to the nearest *hundredth*?

31. Compare using  $<$   $>$  or  $=$ :  $\sqrt{4.6}$  \_\_\_ 2.5

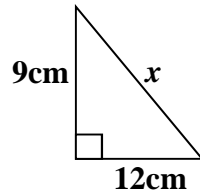
**32. Express in Scientific Notation**

$$(2.7 \times 10^4)(7.5 \times 10^7)$$

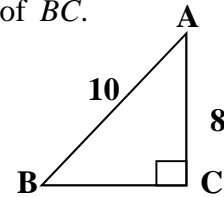
**33. Solve for  $x$  in the following triangle.**  
Round to the nearest *tenth*.



**34. Solve the missing side of the given right triangle.**

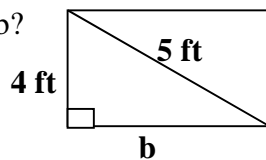


**35. Find the length of  $\overline{BC}$ .**



**36. Express in Scientific Notation:**  $(3.5 \times 10^5) + (7.3 \times 10^4)$

**37. a) What is the measure of  $b$ ?**



b) What is the perimeter of the rectangle?

c) What is the area of the rectangle?

**Prove whether the following can be the sides of a right triangle:**

**38.** 8, 15, and 17

**39.** 12, 14, and 16

**40.** 5, 3, and 4

**Draw a picture and solve the following word problem:**

**41.** The base of a 34 foot ladder is placed 12 feet from a building. How high above the ground is the top of the ladder? Round your answer to the nearest *whole number*.