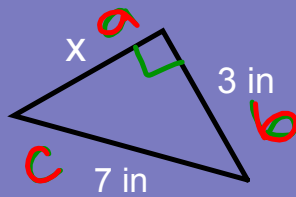


Review Pythag and Distance Formula



$$a^2 + b^2 = c^2$$

$$x^2 + 3^2 = 7^2$$

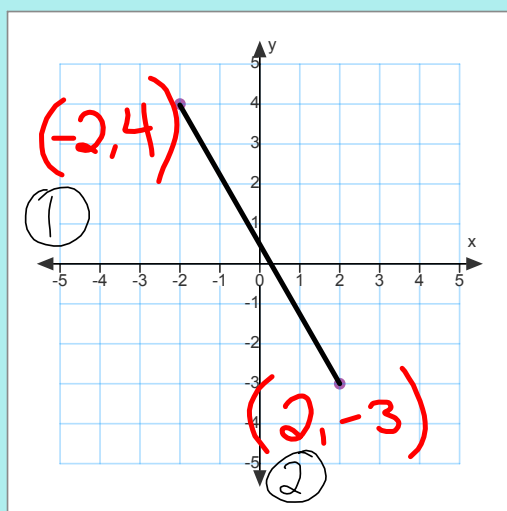
$$x^2 + 9 = 49$$

$$\sqrt{x^2} = \sqrt{40}$$

$$x = 6.31n$$

$$a = 3 \quad b = 4 \quad c = 5$$

$$3^2 + 4^2 = 5^2$$



$$\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$\sqrt{(2 - (-2))^2 + (-3 - 4)^2}$$

$$\sqrt{4^2 + (-7)^2}$$

Exponents

Exponent: ⁽³⁾ means repeated multiplication

Base: (biggest) number you multiply by itself

Power: ⁽⁴⁾ → Answer 64

Evaluate: give an answer that is one number

$$(4)^3 = 4 \cdot 4 \cdot 4 = 64$$

Writing in Exponential Notation:

Expanded Form	Exponential Notation	Evaluate
$3 \cdot 3 \cdot 3 \cdot 3$	3^4	81
$(-2)(-2)(-2)(-2)(-2)$	$(-2)^5$	-32
$(-4)(-4)(-4)(-4)$	$(-4)^4$	256
$(\frac{3}{4})(\frac{3}{4})$	$(\frac{3}{4})^2$	$\frac{9}{16}$
$(-8)(-8)$	$(-8)^2$	64
$(-1)(8)(8)$	-8^2	-64

$$3^3 \cdot 3^2 = 3^6$$

$$3 \cdot 3 \cdot 3 \cdot 3 \cdot 3 = 3 \cdot 3 \cdot 3 \cdot 3 \cdot 3 \cdot 3$$

No

$$(-5)^2 \cdot (-5)^4 = (-5)^6$$