

Absolute Value

Absolute Value: The distance a number is from zero, will Always be positive!

Symbol: **||**

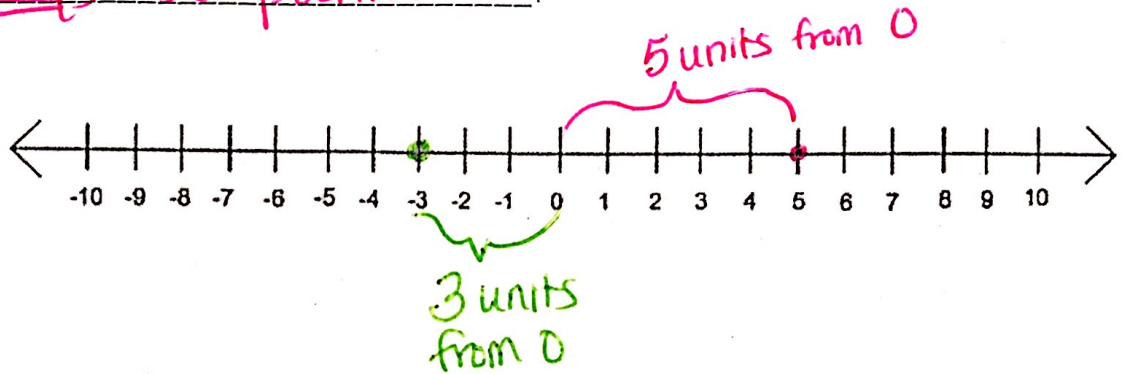
Examples:

$$4) |5| = 5$$

$$4) |-3| = 3$$

$$4) |0| = 0$$

$$4) |-1,021| = 1,021$$



Evaluate the Expression: To evaluate means to solve.

$$1) -x \text{ when } x = -2 \quad -(-2) = 2$$

$$5) -x - 3 \text{ when } x = -6 \quad -(-6) - 3 = 6 - 3 = 3$$

$$2) 12 - |x| \text{ when } x = -4 \quad 12 - |-4| = 12 - 4 = 8$$

$$6) 5 + (-x) \text{ when } x = -3 \quad 5 + (-(-3)) = 5 + 3 = 8$$

$$3) |x| + 9 \text{ when } x = 2 \quad |2| + 9 = 2 + 9 = 11$$

$$7) -(-(-(-x))) \text{ when } x = -1 \quad -(-(-(-(-1)))) = -1$$

$$4) |x| - 1 \text{ when } x = -5 \quad |-5| - 1 = 5 - 1 = 4$$

$$8) -|x| \text{ when } x = -9 \quad -|-9| = -9$$

Comparing Integers

When we compare integers, we use signs such as $<$, $>$, or $=$.

Compare the integers below:

1) -7 _____ -2

2) 4 _____ 0

3) -16 _____ 3

4) 15 _____ -15

5) 2 _____ -4

6) $-|3|$ _____ 0

7) $|x + 2|$ _____ x when $x = 3$

8) $-x$ _____ $|x|$ when $x = -4$

Assignment: Page 24 #2, 4 - 7, 12 - 15, 18 - 21, 27 - 31 (odds), 43-49 (odds), 75, 76

Modified: Page 24 #4 - 7, 12, 18, 18-21, 48, 45, 47, 75, 76