September 1, 2017

* Quiz - Wednesday

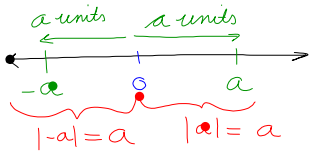
Sep 1-9:51 AM

CORE 1.1

Absolute Value (abs)

$|a|$ → the positive distance from zero.

absolute value bars



Sep 1-10:19 AM

Formal Def. of Absolute Value

$$|x| = \begin{cases} x, \text{ if } x \geq 0 \\ -x, \text{ if } x < 0 \end{cases}$$

$x \in \mathbb{R}$

$x = -5$ so, $|-5| = -(-5)$

$= 5$

Sep 1-10:24 AM

Addition of Integers

① Same "sign"

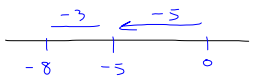
$(+) + (+) = +$

$5 + 3 = +8$

$(-) + (-) = -$

$-5 + (-3) = -8$

$-5 - 3 = -8$



Sep 1-10:28 AM

② Different "signs"

$(+) + (-) =$ Subtract the smaller abs value from the larger & keep the "sign" of the larger.

$5 + (-3) = 5 - 3 = 2$

$|5| \quad |-3|$

$5 - 3 = 2$

$-12 + 3$

$|-12| \quad |3|$

$12 - 3 = -9$

Sep 1-10:32 AM

Commutative Property

"+" $a + b = b + a$

"×" $a \times b = b \times a$

Key: order changes, but the result is the same.

$5 + 3 = 3 + 5$

$8 = 8$

Sep 1-10:36 AM

Associative Property

"+" $a+(b+c)=(a+b)+c$

"×" $a\times(b\times c)=(a\times b)\times c$

$a(bc)=(ab)c$

Key: association changes, the result is the same.

$2+(3+4)=(2+3)+4$

$2+7=5+4$

$9=9$

Sep 1-10:40 AM

① $5+(2y+4)$

unlike terms

Goal: is to associate the 5 & 4

② $5+(4+2y)$ Comm.

③ $(5+4)+2y$ Assoc.

④ $9+2y$ Combine like terms

Sep 1-10:43 AM