August 30, 2016

* Quiz #2 - Tomorrow
  - CORE 1.1
  - Tools

Aug 30-9:52 AM

① $2(x+6)+3(x+2)+10=30$

② $2x+12+3x+6+10=30$ Dist

③ $(2x+3x)+(12+6+10)=30$ comm/assoc

④ $5x+28=30$ assoc.

⑤ $\frac{5x}{5}=\frac{2}{5}$ A.I.

⑥ $x=\frac{2}{5}$ M.I.

Aug 30-10:07 AM

⑥ Additive Identity

$a+0=a$

⑦ Multiplicative Identity

$a \cdot 1 = a$

Aug 30-10:15 AM

① $5(x-1)-3(x+2)+12=20$

② $5x-5-3x-6+12=20$ Dist

③ $5x-3x-5-6+12=20$ comm

④ $2x+1=20$ assoc.

⑤ $2x=19$ A.I.

⑥ $x=\frac{19}{2}$ M.I.

Aug 30-10:18 AM

CORE 1.1

Absolute Value

$|a|=a$

* means distance from zero.
  - is always Positive

$|5|=5$

5 units, 5 units from zero

-5 0 +5

$|-5|=5$

Aug 30-10:30 AM

Addition of Integers

Same Sign

+ + → Positive

$2+3=+5$

− + − → negative

$-5-6=-11$

$(-5)+(-6)$

-6 -5

-11 -5 0

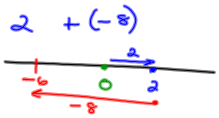
Aug 30-10:35 AM

Different Signs

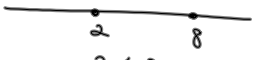
- (+) + (−)
- (−) + (+)

* subtract the small abs from larger & affix the "sign" of the larger!

2 + (−8)



$|2| = 2$ & $|-8| = 8$



$2 < 8$

$8 - 2 = -6$

Aug 30-10:38 AM

Exponents

a^n ← exponent

a ↑ Base

The exponent tells us how many factors of the base are being multiplied.

$5^3 = 5 \cdot 5 \cdot 5$

$= 25 \cdot 5$

$= 125$

Aug 30-10:45 AM