

February 4, 2015

* SSC #2 Due Friday
** only turn in the Cumulative page.*

* Quiz #4 - Friday

- Six Algebra Tools

e.g. adding Inverse Tool

* $a + (-a) = 0$

* $-7 + 7 = 0$

adding Identity

- $a + 0 = a$
- $15 + 0 = 15$

Feb 4-9:04 AM

2.2
 #19) $-(-14) + (-5)$
 $(-1)(-14) + (-5)$
 $14 + (-5) = 9$

#21) $-|-15| + |-7| + (-9) + 13$

$-15 + 7 + (-9) + 13$

$15 > 7$

$\begin{array}{r} 15 \\ -7 \\ \hline -8 \end{array} + (-9) + 13$

$-17 + 13$

-4

Feb 4-9:13 AM

addition of Signed Numbers

① when adding numbers that have the same "sign": add and keep the common sign:

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

② when we have opposite signs:

- find the abs of the numbers
- subtract the small abs value from the larger abs value.
- put the "sign" that was attached to the larger abs value.

Feb 4-9:21 AM

2.2
 #32) ① $-|-62| + |-14| + (-15) + 24$

② $-62 + 14 + (-15) + 24$

③

a) $62 - 14 = 48$
 b) -48

④ $-48 + (-15) + 24$

⑤ $-63 + 24$

⑥ -39

Feb 4-9:31 AM

$-(2x^2 - 3x) + (x^2 - 9x)$

$2x + 3 - 9x = 20$

$-7x = 15$

$x = -\frac{15}{7}$

Feb 4-9:36 AM

2.2
 #74

if $x > 0$ & $y < 0$, then

$|x+y| = |x| + |y|$

~~F~~ or F

$x = 2$
 $y = -5$

$|2+(-5)| = |2| + |-5|$
 $|-3| = 2 + 5$
 $3 \neq 7$

Feb 4-9:45 AM

For all $\mathbb{Z} \ x$
is $|x| > 0$

$$\text{if } +x, \quad |+x| = x$$

$$\text{if } -x, \quad |-x| = x$$

* But if $x=0 \Rightarrow |0| = 0$
 $0 \not> 0 \text{ F}$

Feb 4-9:51 AM