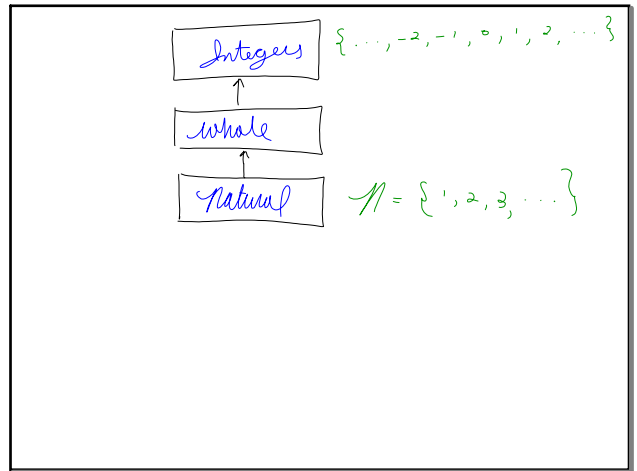


September 14, 2015
 * Quiz #6 - Wednesday
 1.1 - 1.7
 * 1.4 - 1.7
 * Exam #1 - Tuesday, September 25
 Chapters 1, 2

Sep 14-9:03 AM



Sep 14-9:08 AM

Additions
 ① Same "Sign"
 e.g.
 $5 + 3 = +5 + 3 = +8$
 $= 8$
 $-5 - 3 = -5 + (-3) = -8$
 * Add & keep "sign"

Sep 14-9:12 AM

② Opposite Signs
 Absolute Value (abs) of a number
 Notation: $|a| = a$
 (a grouping symbol)
 Key: Absolute Value is Distance from zero. And distance is always positive.
 $|3| = 3$
 abs = 3 units from zero
 $| -5 | = 5$
 5 units from zero
 $|3| \quad | -5 |$
 $3 < 5$

Sep 14-9:15 AM

① $|5 \cdot 3 + 20|$
 $|15 + 20|$
 $|35| = 35$
 ② $|-2| = (-1) \cdot 2 = -2$
 $(-1) \cdot |-2|$
 ③ $-|-2|$ vs $-(-2)$
 * abs!
 -2 $(-1) \cdot (-2)$
 2

Sep 14-9:21 AM

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

 ① $|-8| = 8$
 ② $|3| = 3$
 ③ $3 < 8$ true
 ④ $8 + (-3) = 8 - 3 = 5$
 ⑤ Attach the "sign" that was with the larger absolute.
 $5 \rightarrow -5$

Sep 14-9:28 AM

$$\begin{aligned}
 -5 - 8 &= -5 + (-8) \\
 &= -13 \\
 -8 - 5 &= -8 + (-5) \\
 &= -13
 \end{aligned}$$

Don't write!

$$\begin{aligned}
 -8 - 5 &\neq -8 - (+5) \\
 &\quad \downarrow \\
 &= -8 + (-5)
 \end{aligned}$$

Sep 14-9:40 AM

$$24 - 56 = 24 + (-56)$$

- ① $|24| = 24$
- ② $|56| = 56$
- ③ $24 < 56$
- ④ $56 - 24 = 32$
- ⑤ -32

Sep 14-9:27 AM

*Multiplication (Division)
of
Integers*

* *Same "sign" → Positive*

$$2 \cdot 3 = (+2) \cdot (+3) = +6$$

$$(-2) \cdot (-3) = +6$$

* *Opposite "signs" → Negative*

$$-3 \cdot 4 = -12$$

Sep 14-9:43 AM