

January 25, 2016
 * Quiz #1 - Wednesday
 COR 1.1

Jan 25-9:52 AM

0. $\bar{2}$ Convert to a fraction

① Let $x = 0.\overline{2}$ one place

② $10 \cdot x = 10.0\overline{2}$
 $10x = 2.2\overline{2}$

③ $10x = 2.2\overline{2}$
 $-x = 0.\overline{2}$

$9x = 2$
 $x = \frac{2}{9}$

$\frac{22}{99} = \frac{2 \cdot \cancel{11}}{3 \cdot 3 \cdot \cancel{11}}$ ← a "one"

$= \frac{2}{9}$

② $\begin{array}{r} 22 \\ \cdot 11 \\ \hline 22 \\ 220 \\ \hline 242 \end{array}$

③ $\begin{array}{r} 99 \\ \cdot 11 \\ \hline 99 \\ 990 \\ \hline 1089 \end{array}$

Jan 25-10:10 AM

Additive Identity (A.I.)
 $a + 0 = a$

Additive Inverse (A.I.)
 $a + (-a) = 0$

$-\frac{3}{11} + (\frac{3}{11}) = 0$

$x - 9 = 25$
 $x + 9 = 34$
 $x = 34$

Jan 25-10:17 AM

Absolute Value (A.V.)
 (abs)

- * The Distance of something from zero.
- * Distance is always positive.
- * $|a| = a$

$|-7| = 7$

$-|8| = (-1) \cdot |8|$
 $= (-1) \cdot 8$
 $= -8$

$-|-13| = (-1) \cdot |-13|$
 $= (-1) \cdot 13$
 $= -13$

Jan 25-10:36 AM

Integer Addition

① If numbers have the same "sign" then add and keep the common sign.

$5 + 7 = 12$
 $-5 - 7 = -5 + (-7) = -12$

② If numbers have opposite "signs" then subtract the smaller absolute value from the larger and attach the "sign" of the larger number.

$-11 + 5 =$
 $\left. \begin{array}{l} |-11| \\ |5| \end{array} \right\} 11 - 5 = -6$
 $11 > 5$

Jan 25-10:43 AM