


September 9, 2015

Quiz #2 

Sep 9-1:07 PM

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

$$3x - 12 = 2x + (6 + 2) \quad \text{D}$$

$$\boxed{3x} - 12 = \boxed{2x} + 8 \quad \text{A. J. J.}$$

$$-2x + 12 \quad -2x + 12$$

$$1 \cdot x + 0 = 0 + 20 \quad \text{A. J.}$$

$$\boxed{x = 20}$$

Sep 9-1:18 PM

1.5 Order of Operations

#1) Simplify Grouping Symbols
 (), [], { }, |a|, \sqrt{a} , $\frac{a}{b}$

#2) Evaluate Exponents
 $5^2 = 5 \cdot 5 = 25$

#3) Multiplication & Division
 which ever comes first working from left to right.

#4) Addition & Subtraction
 which comes first $L \rightarrow R$

Sep 9-1:25 PM

#43)

$$7 + 3 \cdot [8 + 8 \cdot (5 + 9)]$$

$$7 + 3 \cdot [8 + 8 \cdot (14)]$$

$$7 + 3 \cdot [8 + 112]$$

$$7 + 3 \cdot [120]$$

$$7 + 360$$

$$\boxed{367}$$

Sep 9-1:39 PM

#53

$$3 \{ 8 [6+3] - 8 [7+3] \}$$

$$3 \{ 8 \cdot 11 - 8 \cdot 10 \}$$

$$3 \{ 88 - 80 \}$$

$$3 \{ 8 \} = \boxed{24}$$

Sep 9-1:49 PM

#91)

$$40 - (3 \cdot 7 - 9)$$

$$\frac{8 \cdot 2 - 2}{40 - (21 - 9)}$$

$$\frac{16 - 2}{40 - (12)}$$

$$\frac{14}{14}$$

$$\frac{28}{14} = \frac{2 \cdot 2 \cdot 7}{2 \cdot 7} = \frac{2}{1} \cdot 1 \cdot 1 = 2$$

Sep 9-1:52 PM

1.6

Expressions (no equal or inequality signs)

$$2x, x^2 - 3x + 4,$$

$$-6x^5 - 2x^4 + x^2 - 9$$

Sep 9-1:59 PM

Whole Numbers = $\{0, 1, 2, \dots\}$

↓

Integers: $\{\dots, -2, -1, 0, 1, 2, \dots\}$

Sep 9-2:03 PM

Integers	$\{\dots, -2, -1, 0, 1, 2, \dots\}$
whole	$\{0, 1, 2, 3, \dots\}$
Natural	$\{1, 2, 3, \dots\}$

Sep 9-2:07 PM

Addition of Integers

Absolute Value

$$|a| = a$$

* Key: Distance from zero. And Distance is always positive!

$|3| = 3$

+3 units +3 units

$|-3| = 3$

Sep 9-2:07 PM

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

$$(-1) \cdot |4| = (-1) \cdot 4 = -4$$

$$- |6^2 - 2(3-2)|$$

$$- |6^2 - 2(1)|$$

$$- |36 - 2(1)|$$

$$- |36 - 2|$$

$$- |34| = \boxed{-34}$$

Sep 9-2:14 PM

$$- |-5| = (-1) \cdot 5 = \boxed{-5}$$

$$* - (-5) = (-1) \cdot (-5) = \boxed{5}$$

Sep 9-2:18 PM

Adding Like "Signs"

$$\begin{array}{cccc}
 + & + & + & + \\
 3 & + & 4 & \\
 \hline
 = & 7 & &
 \end{array}
 \qquad
 \begin{array}{cccc}
 - & + & - & - \\
 -3 & + & -4 & \\
 \hline
 = & -7 & &
 \end{array}$$

* Add & keep sign

Sep 9-2:20 PM

Adding Oposite "Signs"

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

Using Absolute Value (abs)

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

$$|3| = 3 \quad | -8 | = 8$$

$$3 < 8 \text{ true}$$

$$8 - 3 = -5$$

* what was the sign associated with the largest abs? *negative!*

Sep 9-2:22 PM

$$14 - 23 = -9$$

$$|14| = 14 \quad | -23 | = 23$$

$$23 - 14 = 9$$

$$+9 - 3 = 9 + (-3) = +6$$

$$|9| = 9 \quad | -3 | = 3$$

$$9 - 3 = 6$$

Sep 9-2:29 PM

For Monday

Read and or do

$$1.5 - 1.7$$

Read 2.1

Sep 9-2:31 PM