10.5.2011 Ordering Rational Numbers

Do Now:

1. $(-3) + (-3)(-3) - \frac{(-3)}{(+3)}$
   $(-3) + 9 - (-1)$
   $6 - (-1)$
   $6 + 1 = 7$
2. $(-5) - (-5)(-5) + |5|$
   $(-5) - 25 + 5$
   $(-5) + (-25) + 5$
   $-30 + 5 = -25$
3. -3 + 4 – 5 – 2
   -1 – 5 – 2
   -1 + (-5) + (-2)
   -6 + (-2) = -8

In Composition Notebook under 7.1.b

Top left quarter of page

7.1.B: Represent addition, subtraction, multiplication and division of positive and negative integers visually and numerically.

Top right quarter of page

Restate in your own words

Ordering Rational Numbers

Rational Numbers Definition

- Integers
- Fractions
- And Decimals

Ordering Decimals

1. Negative numbers are less than positives.
2. Line up decimal point.
3. Compare digits from left to right until one numbers place value is larger than the others'.
4. The number with the larger digit is the larger number.

Ex. Order these decimals: {.094, -2.1, -2.3, 1.48, -0.75}

-2.3, -2.1, -0.75, .094, 1.48

Ordering Fractions

1. Negative numbers are less than positives.
2. Find common denominator and equivalent fraction.
3. Compare numerator.
4. Number with greater denominator is greater.

Ex. Order the following fractions $\{1\frac{12}{25}, -2\frac{1}{2}, \frac{3}{4}, -2\frac{5}{8}\}$

$\{, -2\frac{5}{8}, -2\frac{1}{2}, , \frac{3}{4}, 1\frac{12}{25}\}$

Order All Rational Numbers – Change all numbers to decimal or fraction and compare as described above.

Ex. Order all the rational numbers $\{1\frac{12}{25}, -2\frac{1}{2}, \frac{3}{4}, -2\frac{5}{8}$, .094, -2.1, -2.3, 1.48, -0.75$\}$

$1\frac{12}{25} = 1.48$

$-2\frac{1}{2} = -2.5$

$\frac{3}{4} = 0.75$

$-2\frac{5}{8} = -2.625$

$\{-2\frac{5}{8}, -2\frac{1}{2}, -2.3, -2.1, -0.75, 0.094, \frac{3}{4}, 1\frac{12}{25} = 1.48\}$