Name_____

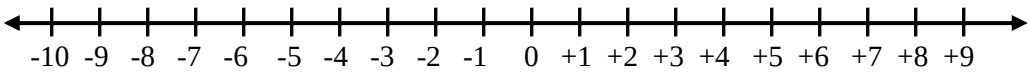
Reteaching Page

9.2 – Comparing and Ordering Integers

There are 2 ways to compare and order integers. You can use a number line to see the values or you can apply an absolute value rule.

Use a number line:

1. Plot the integers that you wish to compare or order.
2. The farthest **left** is the number with the **least** value!



Use <. > or = to compare the values.

2 ___ -1 -5 ___ -3 -2 ___ -4 -5 ___ 5

Put the data set in order from **least** to greatest.

_____ 0, -4, -2, +3 _____ -7, -10, -6, -4

_____ +2, -2, +5, -5 _____ -9, 0, -10, -5

Use the absolute value rule.

1. Positive numbers are greater when the absolute value is larger.
2. Negative numbers are less when the absolute value is larger!
   a. -10 is less than -5 **and** the |-10| > |-5|
   b. |-10| > |-5| since negative numbers are opposites, switch the sign!
   c. -10 < -5

48 ___ -15 → Positives are always greater then negatives. 48 ___ -15

-25 ___ -18 → |-25| ___ |-18| → switch the sign -25 ___ -18

-37 ___ -42 → |-37| ___ |-42| → switch the sign -37 ___ -42

-18 ___ 6 → Positives are always greater then negatives. -18 ___ 6

To order numbers using the absolute value rule – separate the negatives and positives!

-17, -10, +5, -24 → +5 -17, -10, -24

Now order each part separately. +5, -10, -17, -24

Notice that the negative side's absolute values are increasing as the true values decrease!