Grade 6 Math   Name: _____
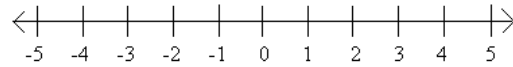
Date: _____   Core/Period: _____

Graphing Equations and Inequalities on Number Lines Guided Notes

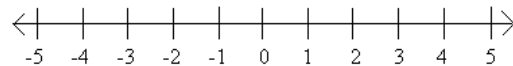**Graphing an Equation on a Number Line**:

(equal)   X = 4

The value of x, which is 4, is represented by a darkened _____ at 4 to the _____ of 0 on the number line.

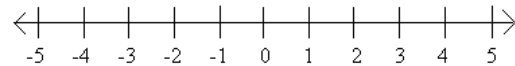**Graphing Inequalities on a Number Line**:

(greater than)   Y > 3

The value of y, which is any number _____ than 4, is represented by an _____ at 3 to the right of zero with an _____ pointing to right on the number line. An open circle means it _____ equal that value, and the arrow (ray) pointing to the right means that it can be any value _____ than the number that is circled.
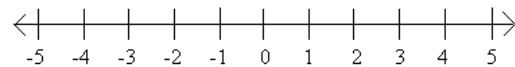
(less than)   Z < 5

The value of z, which is any number _____ than 5, is represented by an _____ at 5 to the right of zero with an _____ pointing to left on the number line. An open circle means it _____ equal that value, and the arrow (ray) pointing to the left means that it can be any value _____ than the number that is circled.
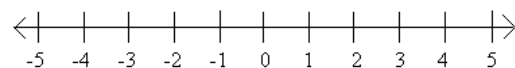
(greater than or equal)   W ≥ -2

The value of w, which is _____ to -2 and any number _____ than -2, is represented by a _____ at 2 to the left of zero with an arrow pointing to _____ on the number line. The point means it _____ that value, and the arrow (ray) pointing to the right means that it can be any value _____ than the number where the point is located as well.

(less than or equal)   V ≤ 1

The value of v, which is _____ to 1 and any number _____ than 1, is represented by a _____ at 1 to the right of zero with an arrow pointing to _____ on the number line. The point means it _____ that value, and the arrow (ray) pointing to the left means that it can be any value _____ than the number where the point is located as well.