Graphing Inequalities
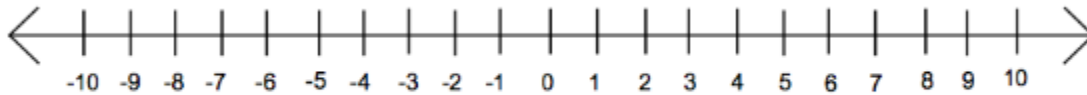
When graphing inequalities, think about the solutions to the inequality.

1) $x < 5$

Choose three values that would make the inequality true.

_____   _____   _____

Is 5 a solution to the inequality? _____

Plot the values on the number line and graph.

2) $x > 2$

Choose three values that would make the inequality true.

_____   _____   _____

Is 2 a solution to the inequality? _____

Plot the values on the number line and graph.

3) $x \geq -3$

Choose three values that would make the inequality true.

_____ _____ _____

Is -3 a solution to the inequality? _____

Plot the values on the number line and graph.

```
<---+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+-->
   -10 -9 -8 -7 -6 -5 -4 -3 -2 -1  0  1  2  3  4  5  6  7  8  9 10
```

4) $x \leq 0$

Choose three values that would make the inequality true.

_____ _____ _____

Is 0 a solution to the inequality? _____

Plot the values on the number line and graph.

```
<---+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+-->
   -10 -9 -8 -7 -6 -5 -4 -3 -2 -1  0  1  2  3  4  5  6  7  8  9 10
```

5) $4 < x$

Choose three values that would make the inequality true.

_____ _____ _____

Is 4 a solution to the inequality? _____

Plot the values on the number line and graph.

```
<---+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+-->
   -10 -9 -8 -7 -6 -5 -4 -3 -2 -1  0  1  2  3  4  5  6  7  8  9 10
```