Inequality Symbols

< less than
> greater than
≤ less than or equal to
≥ greater than or equal to

The numbers to the left are less than the numbers to the right, -9 < 6

The numbers to the right are greater than the numbers to the left, 4 > 2

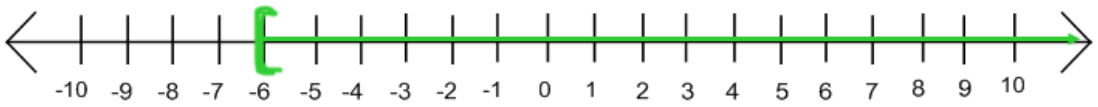
If something is at least a number, then it is greater than or equal to it, i.e. “it is at least 72°” then we could write: temp ≥ 72° or 72° ≤ temp

Graphing

1.) Use ‘(‘ or ‘)’ on the endpoint(s) not included in the solution, see notation section which follows, some people use ○.
2.) Use ‘[‘ or ‘]’ on the endpoint(s) included in the solution, some people use ●.
3.) Pick a point on each side of the endpoint(s) to check which way the line goes.

$x \geq -6$

$-6 \leq x$



Note: Since we use (,), [and] for intervals, I recommend using them on the number lines. It makes it a little easier to keep track of what is needed

Notations

Inequality Notation	Interval Notation	Meaning in Words
x < b	(-∞, b)	All numbers less than b, but not including b.
x ≤ b	(-∞, b]	All numbers less than b, including b.
a < x	(a, +∞)	All numbers greater than a, but not including a.
a ≤ x	[a, +∞)	All numbers greater than a, including a.