U4L1: Intro to Inequalities

Inequalities are a pair of expressions which are not equal.

It is comparing two different amounts.

The following symbols are used to relate the two expressions in an inequality:

<i>x</i> >	GREATER THAN	MORE THAN
		BIGGER THAN
$x \ge$	EQUAL TO OR	THE SAME AS
	GREATER THAN	MORE THAN
		BIGGER THAN
<i>x</i> <	LESS THAN	SMALLER THAN
		LITTLER THAN
$x \leq$	EQUAL TO OR	THE SAME AS
	LESS THAN	SMALLER THAN
		LITTLER THAN

Inequalities can be expressed with those symbols or words, or through graphs.

Graphs are represented on <u>number lines</u> and use circles and arrows to explain the inequality.





Open circles mean the number with the circle is NOT included.

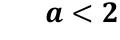


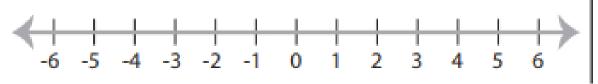


Closed circles means the number with the circle is included.

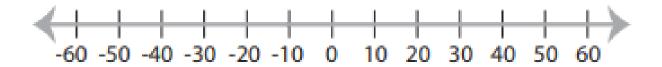
Practice!

Graph the following inequalities:

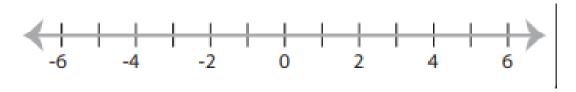




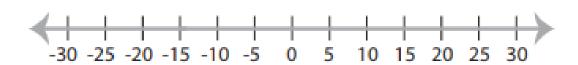
$$x > -10$$



$$b \leq 4$$



$$y$$
 ≥ −15

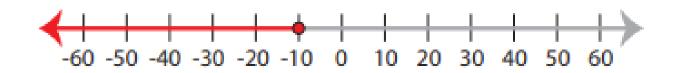


Name:

Write the inequality with symbols for the following graphs / phrases:







M is equal to, or lesser than -2.

B is greater than -16.