

Unit 8 Solving Equations & Inequalities

8.5 Representing Inequalities

Inequality –

Inequality Symbols:

$<$
 $>$
 $\leq$
 $\geq$
 $\neq$

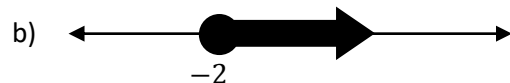
We can express inequalities:

- 1) Verbally/written
- 2) Algebraically (with an inequality sign)
- 3) Visually/graphically (on a number line)

Ex. Show each statement graphically and algebraically:

- a) All numbers equal to at most -1 .
- b) You must be at least 16 years old to get a driver's license.

Ex. State each inequality shown in words and algebraically:



Combination (compound) Inequalities

Ex. The average temperature fluctuates from a low of -18°C to a high of 21°C .

Ex. $x < 5$ and $x \geq 0$

Note:

$$x > 8$$

$$8 < x$$