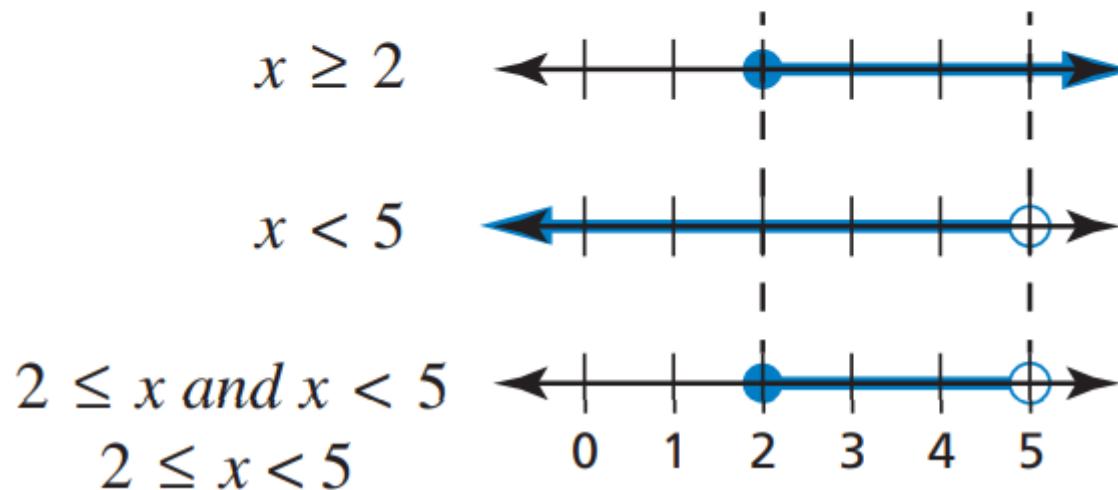


A compound inequality is an inequality formed by joining two inequalities with the word “and” or the word “or.”

The graph of a compound inequality with “and” is the *intersection* of the graphs of the inequalities. The graph shows numbers that are solutions of *both* inequalities.

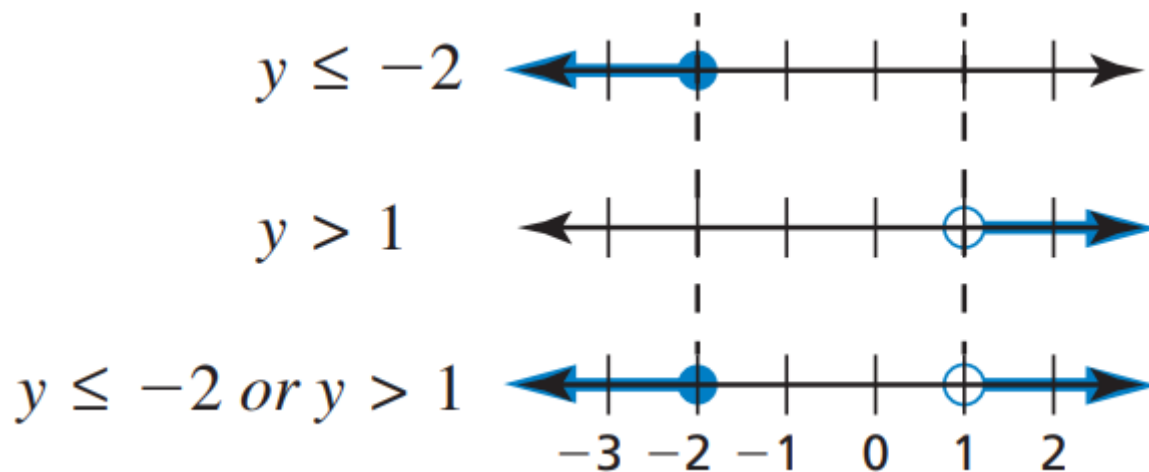


$$y - 3 \geq -11 \text{ and } y - 3 \leq -8$$

$$-2 \leq x - 3 < 4$$

$$6 \leq r + 7 < 10$$

The graph of a compound inequality with “or” is the *union* of the graphs of the inequalities. The graph shows numbers that are solutions of *either* inequality.



$$a + 1 < 4 \text{ or } a - 1 \geq 3$$

$$x > 2 \text{ or } x \geq 0$$