$x > 5$

List possible values for x.

$x < 2$

List possible values for x.

$x \leq 6$

List possible values for x.

$x \geq -4$
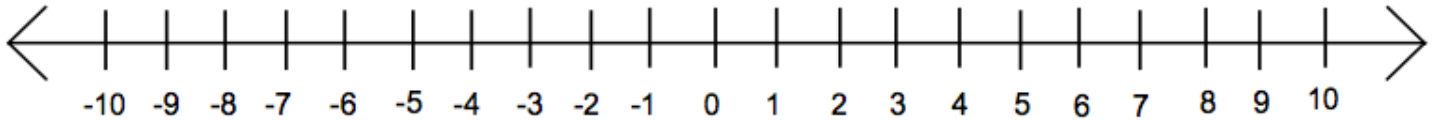
List possible values for x.

$2 > x$
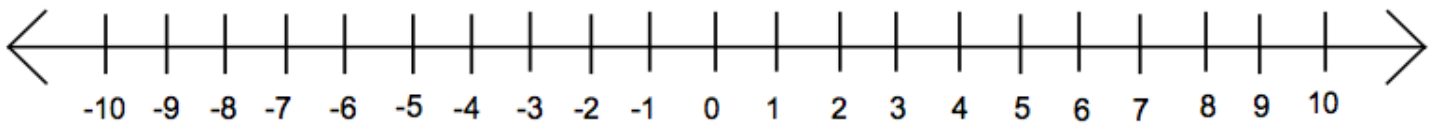
List possible values for x.

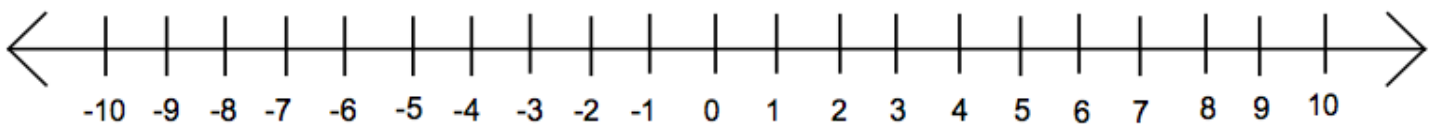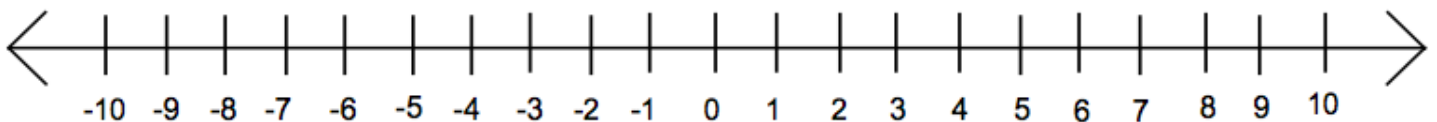# Grahing Inequalities

$x \geq 2$

$x \leq 1$

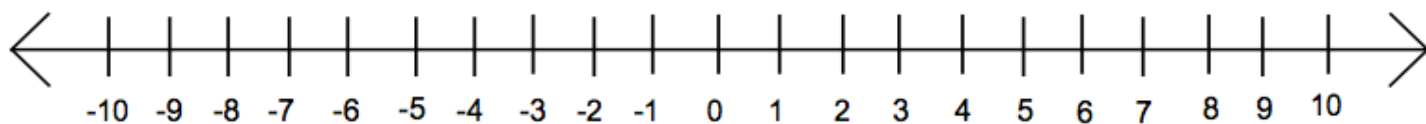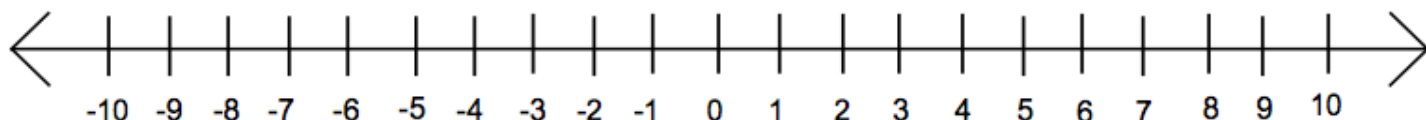# How do we show the difference between > and ≥ when graphing?

$x > -6$

$x < 8$

x≥-4

x<5

Write an inequality for the graph.

4<10

If we add 6 to each side, will the statement remain true?

4<10

If we subtract 3 from each side will the statement remain true?

4<10

If we multiply each side by 4 will the statement remain true?

4<10
If we divide each side by 2 will the statement remain true?

4<10
If we multiply each side by -5 will the statement remain true?

4<10
If we divide each side by -2 will the statement remain true?

What must you do to the inequality when multiplying and dividing by a negative to keep the statement true?

Solve $3x > 12$

Solve $x + 4 < 9$

Solve $x - 3 \geq -5$

Solve $\dfrac{x}{5} \geq 3$

Solve $-2x > 22$

Solve $\dfrac{x}{-4} \leq 10$

Solve $-2(3x - 4) > 22$