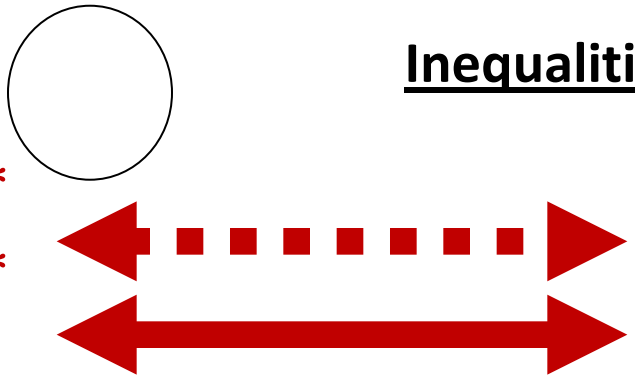
Inequalities on Number Line



use > and <

use ≥ and ≤

* Graph with $y = mx + b$

  Test a point (0,0) and shade the true part

Ex1) $x - 4y \leq 7$

Determine if each is a solution.

a) (0,0)

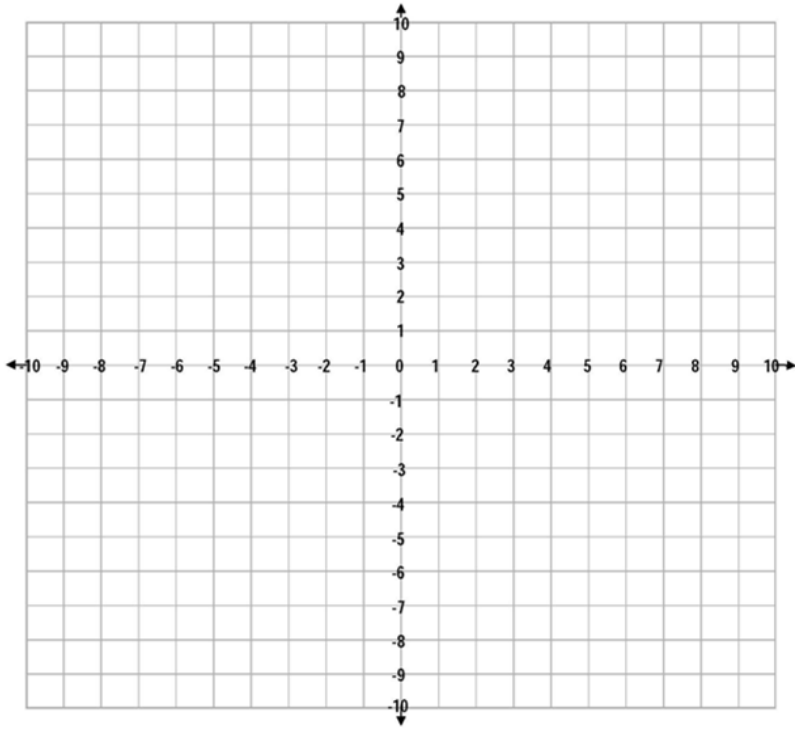
b) (7,-1)

c) (9,2)

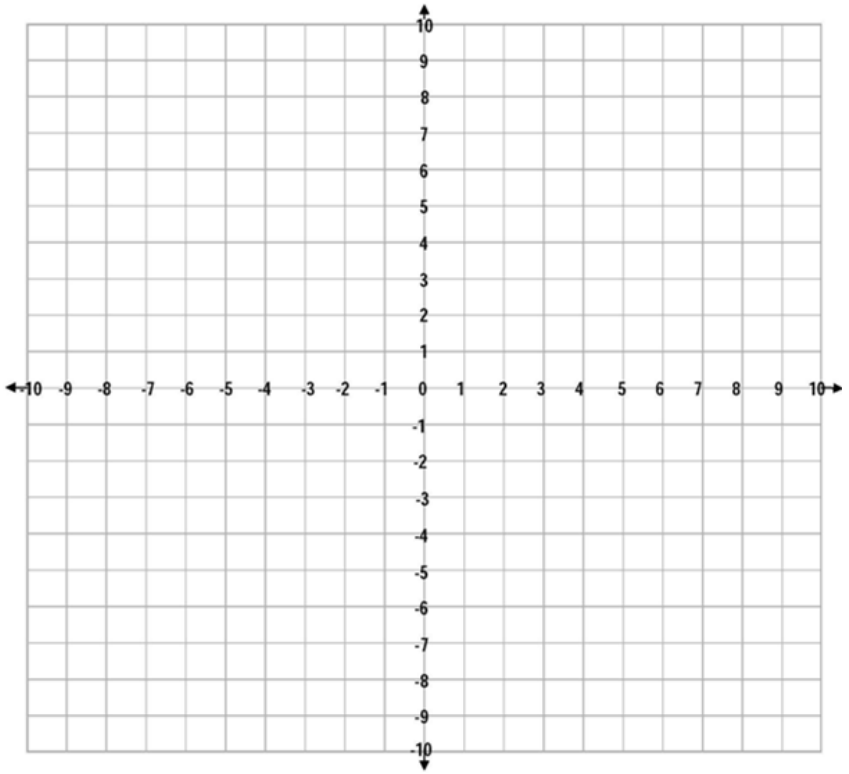
d) (7,0)

Graph each

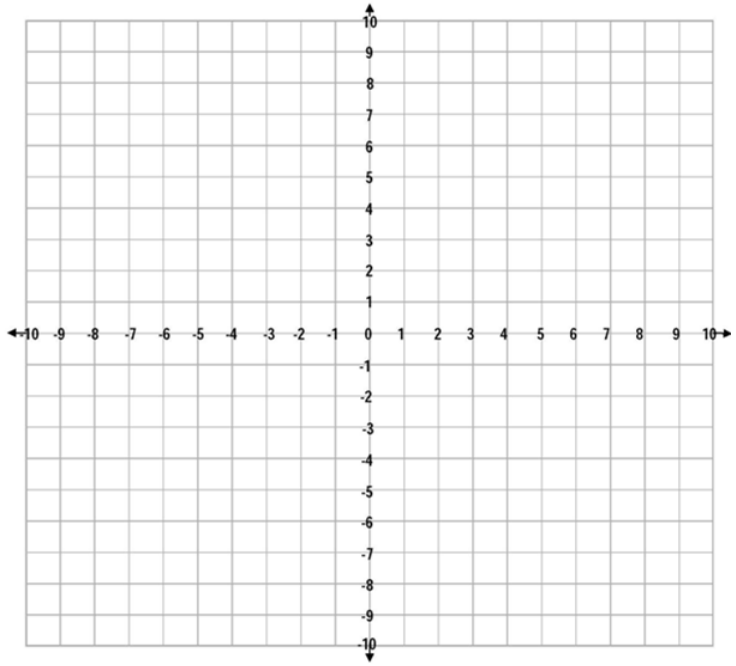
Ex2) $-x + 2y < 8$



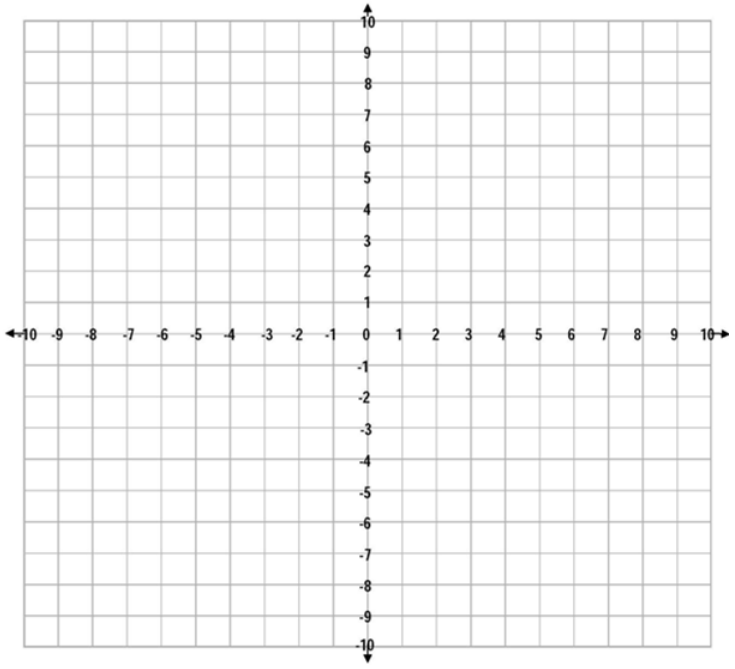
Ex3) $x - 3y \geq 12$



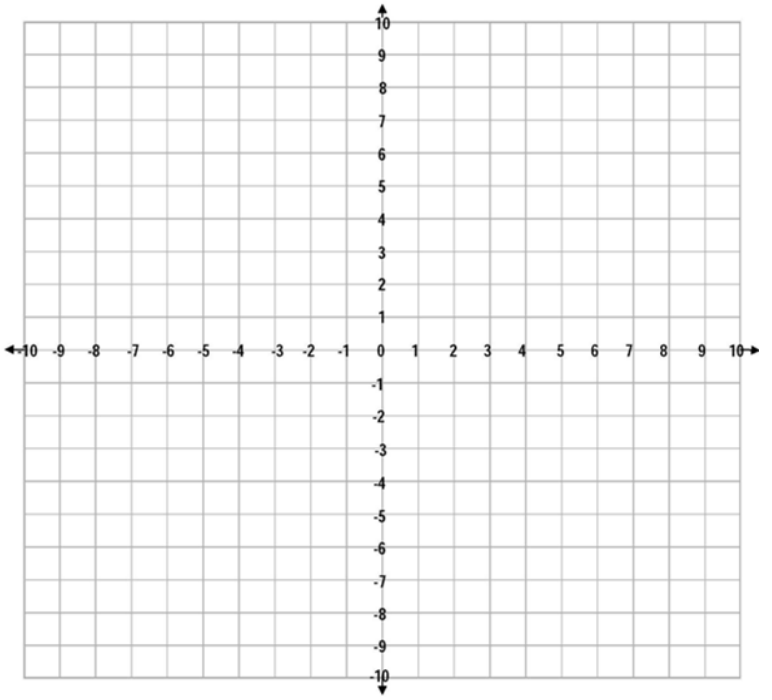
E4) $\frac{1}{2}(x+2)+3y<8$



Ex5) $2(x+1)\geq\frac{1}{4}y-1$



Ex6) $y < 5$



Ex7) $x \geq -2$