

Linear Programming Algebraic Worksheet

CP Algebra 2

Find the maximum and minimum values of each objective function for the given constraints.

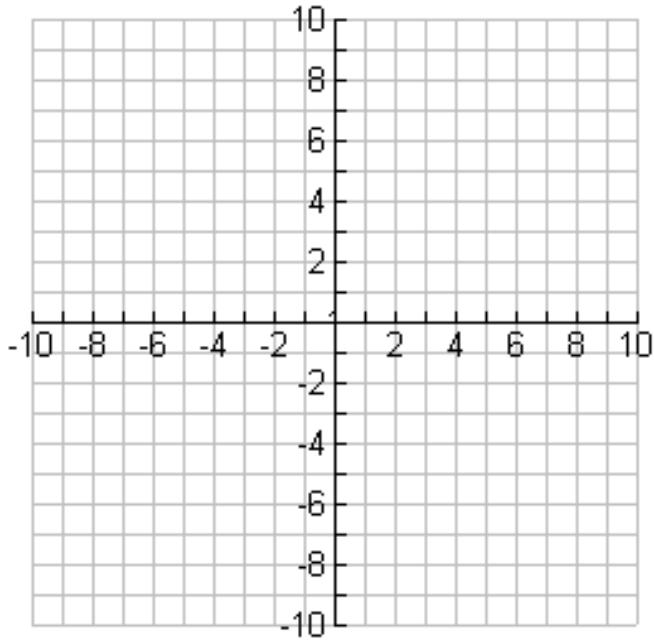
1.)

$$y \leq 4$$

$$y \geq 2x - 2$$

$$x \geq -3$$

$$f(x, y) = 10x + 3y$$



2.)

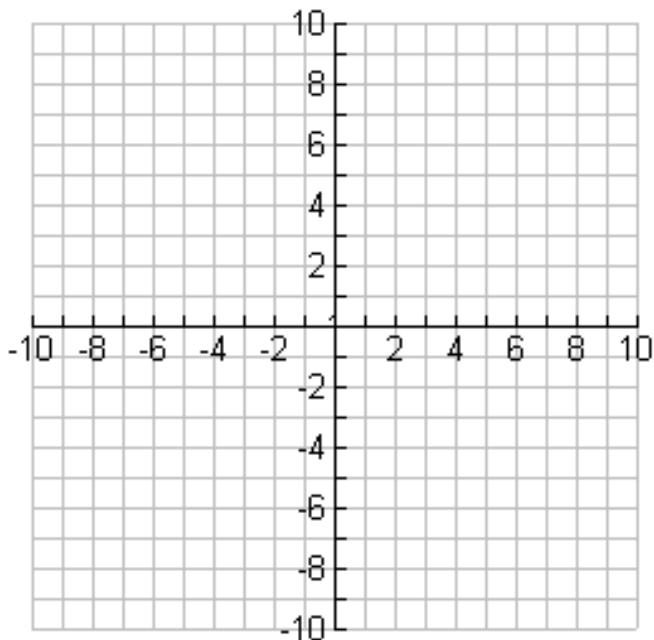
$$y \leq -\frac{2}{3}x + 7$$

$$y \geq -4$$

$$x \geq -3$$

$$y \geq 3x - 4$$

$$f(x, y) = -3x + y$$



3.)

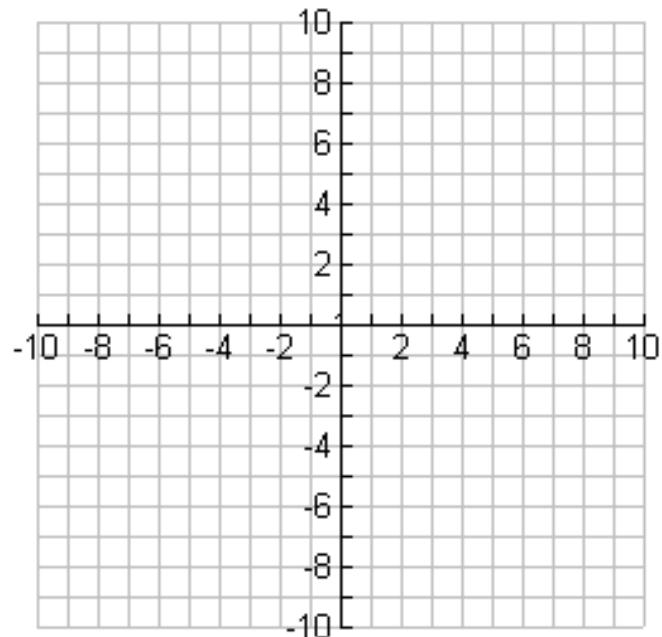
$$x + y \leq 7$$

$$x - y \leq 5$$

$$x \geq 0$$

$$y \geq 0$$

$$f(x, y) = 5x + 2y$$



4.)

$$5x + 2y \leq 20$$

$$x - y \leq 4$$

$$x \geq 0$$

$$y \geq 0$$

$$f(x, y) = 10x + y$$

