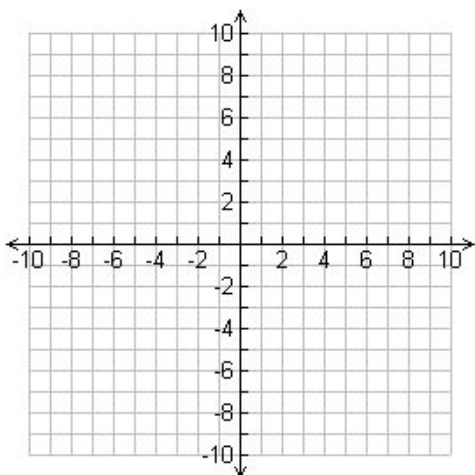


9.6 Systems of Inequalities  
Honors Advanced Algebra with Trig

1. Graph the following systems of inequalities

a.

$$\begin{aligned}x &\geq 5 \\x + y &\leq 3\end{aligned}$$

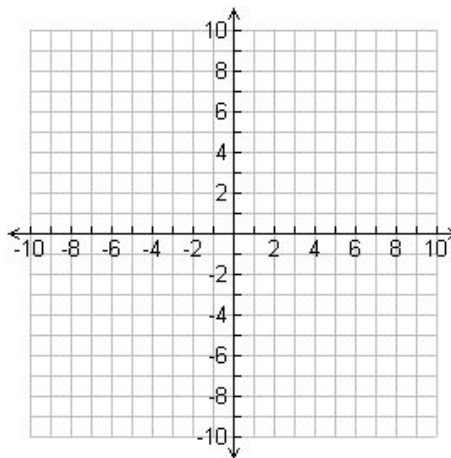


Is  $(5, -2)$  a solution to the system?

Is  $(51, -96)$  a solution to the system?

b.

$$\begin{aligned}4x + 5y &> -20 \\4x + 5y &> 10\end{aligned}$$

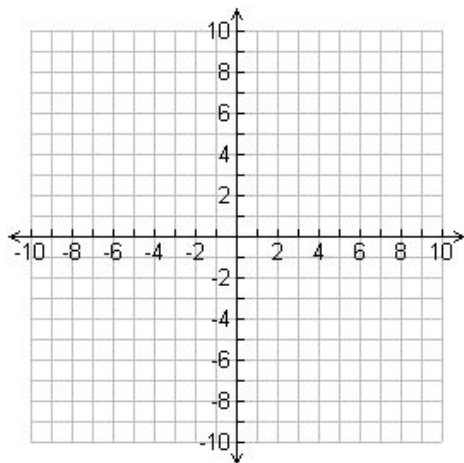


What would be the solution to:

$$\begin{aligned}4x + 5y &< -20 \\4x + 5y &> 10\end{aligned}$$

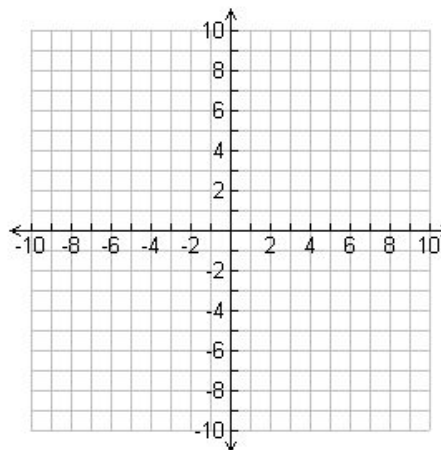
c.

$$\begin{aligned}|y| &\leq 3 \\y &> -|x| + 2\end{aligned}$$



d.

$$\begin{aligned}x - y &\leq 7 \\x + y &< 7 \\x &> 2\end{aligned}$$

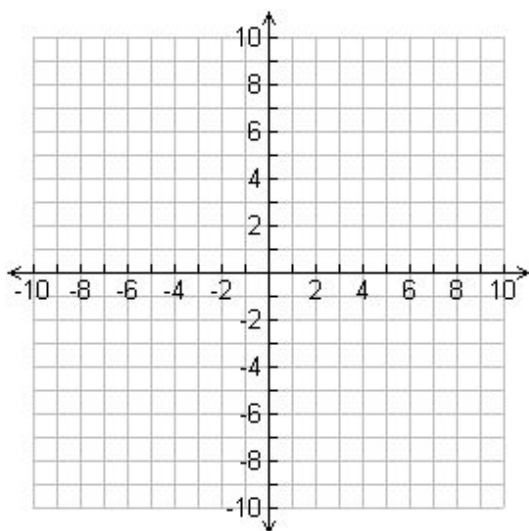


9.6 Systems of Inequalities  
Honors Advanced Algebra with Trig

e.

$$y < 4 - x^2$$

$$x < y - 1$$

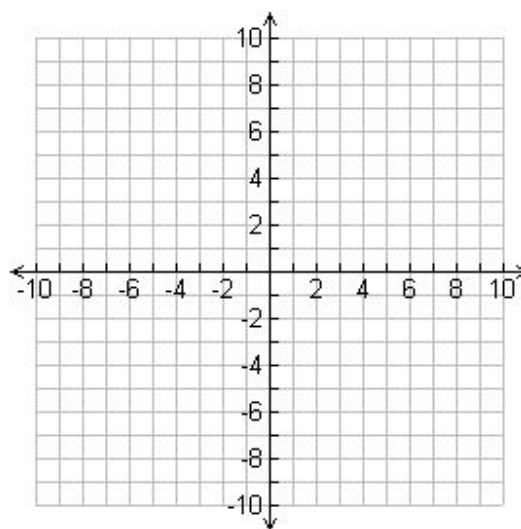


f.

$$|y| \leq 1$$

$$x \geq 0$$

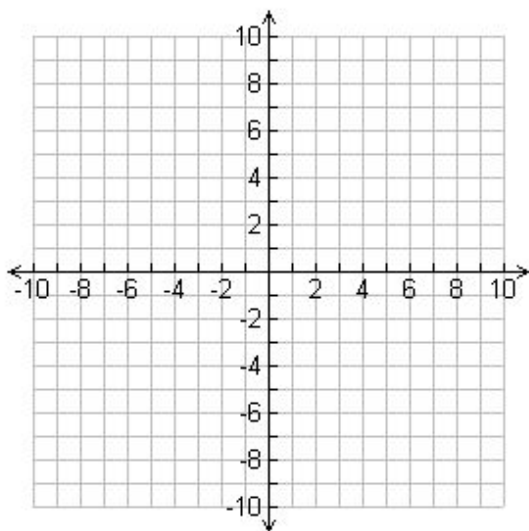
$$y > 2|x| + 1$$



g.

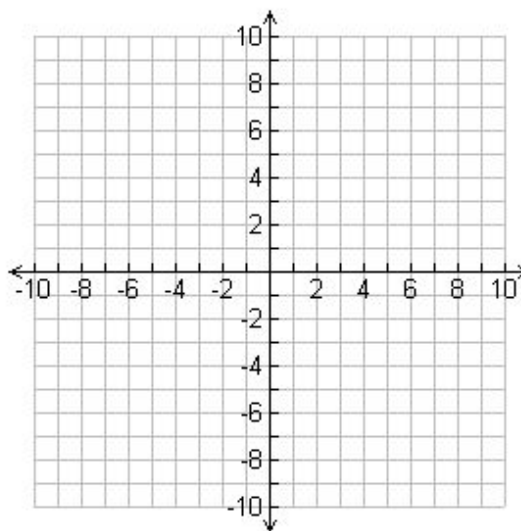
$$y > |x + 2|$$

$$y \leq 2x + 10$$



h.

$$y > \sqrt{x + 1}$$



9.6 Systems of Inequalities  
Honors Advanced Algebra with Trig

i.

$$y < \sqrt{x+4} - 2$$

