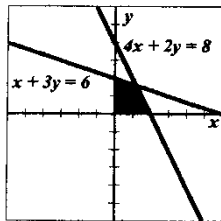


Berkeley College
GHW #11 Linear Inequalities in Two Variables

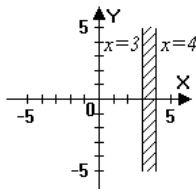
NAME _____

DATE _____

1. Find the graphical solution of the inequality $2y + 8 \leq 0$.
2. Find the graphical solution of the inequality $3x - 4y \geq 12$.
3. Find the graphical solution of the inequality $x - y \leq 3$.
4. Write a system of inequalities that describes the shaded region shown below.



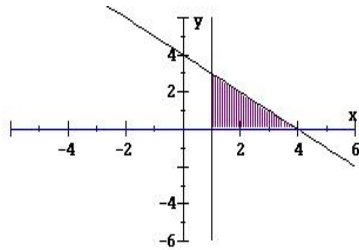
5. Write a system of inequalities that describes the shaded region shown below.



6. Determine the solution set for the following system of inequalities graphically.

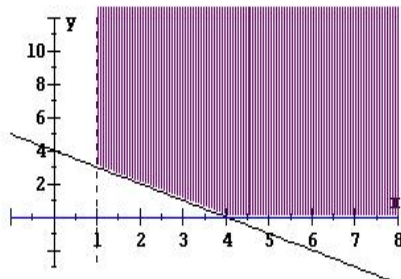
$$2x + y \leq 6, \quad x + 3y \leq 6, \quad x \geq 0, \quad y \geq 0$$

7. Write a system of linear inequalities that describes the shaded region.



- a. $\begin{cases} x+y \leq 4 \\ x \geq 1 \\ y \geq 0 \end{cases}$ b. $\begin{cases} x+y > 4 \\ x \geq 1 \\ y \geq 0 \end{cases}$ c. $\begin{cases} x+y \leq 4 \\ x > 1 \\ y \geq 0 \end{cases}$ d. $\begin{cases} x+y \geq 4 \\ x \geq 1 \\ y \leq 0 \end{cases}$

8. Write a system of linear inequalities that describes the shaded region.



- a. $\begin{cases} x+y > 4 \\ x \geq 1 \\ y \geq 0 \end{cases}$ b. $\begin{cases} x+y < 4 \\ x \geq 1 \\ y \geq 0 \end{cases}$ c. $\begin{cases} x+y \geq 4 \\ x > 1 \\ y \geq 0 \end{cases}$ d. $\begin{cases} x+y \geq 4 \\ x \geq 1 \\ y \leq 0 \end{cases}$