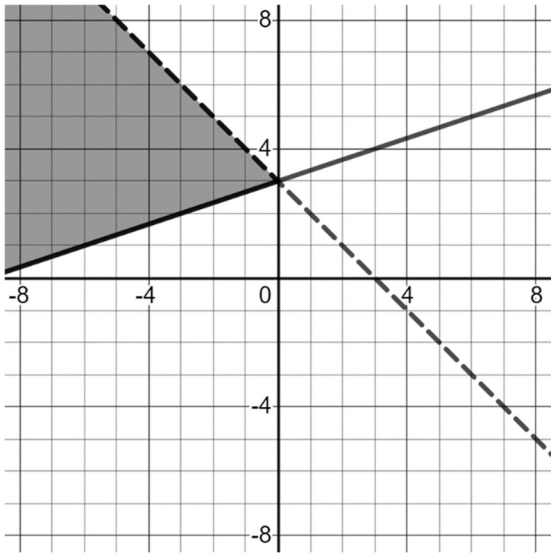
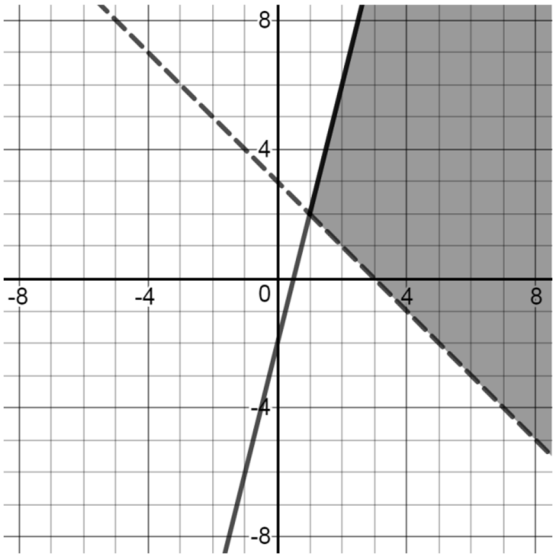
Systems of Linear Inequalities (ALG.SYS.08)

Graph each system of linear inequalities.

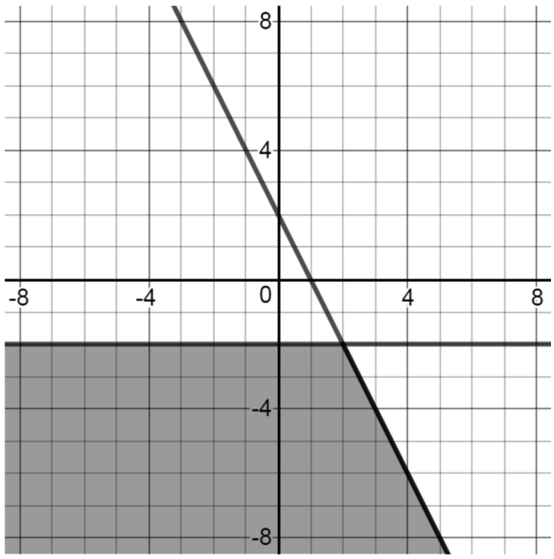
1. $\begin{cases} y < -x + 3 \\ y \geq \frac{1}{3}x + 3 \end{cases}$



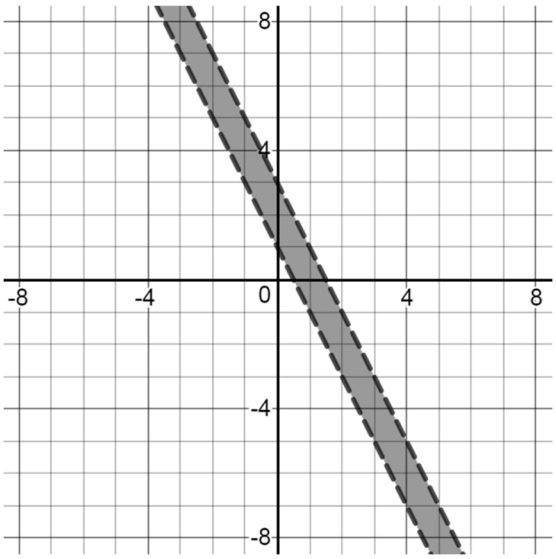
2. $\begin{cases} y \leq 4x - 2 \\ y > -x + 3 \end{cases}$



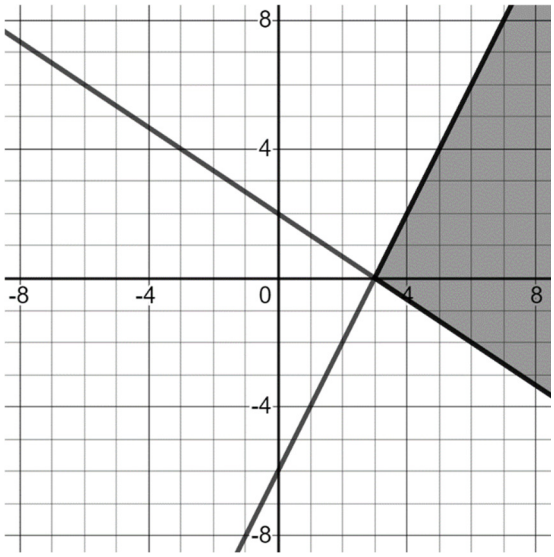
3. $\begin{cases} y \leq -2x + 2 \\ y \leq -2 \end{cases}$



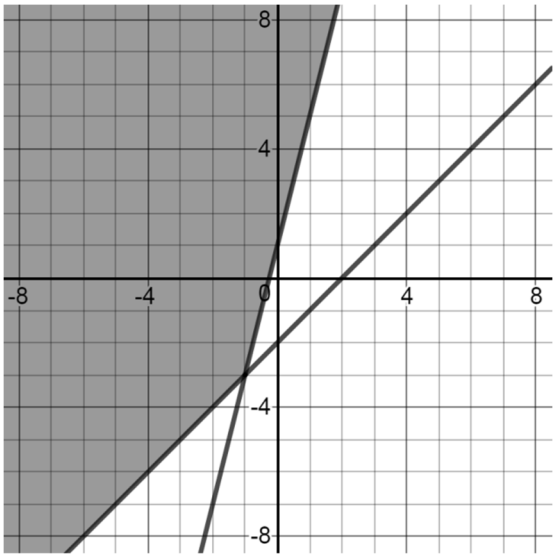
4. $\begin{cases} y < -2x + 3 \\ y > -2x + 1 \end{cases}$



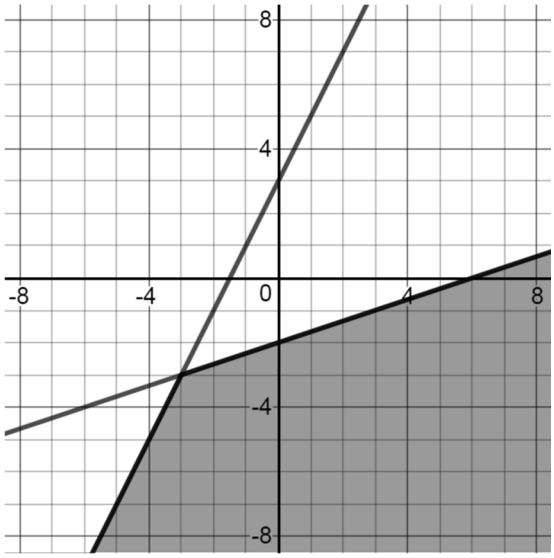
5. $\begin{cases} y \geq -\frac{2}{3}x + 2 \\ y \leq 2x - 6 \end{cases}$



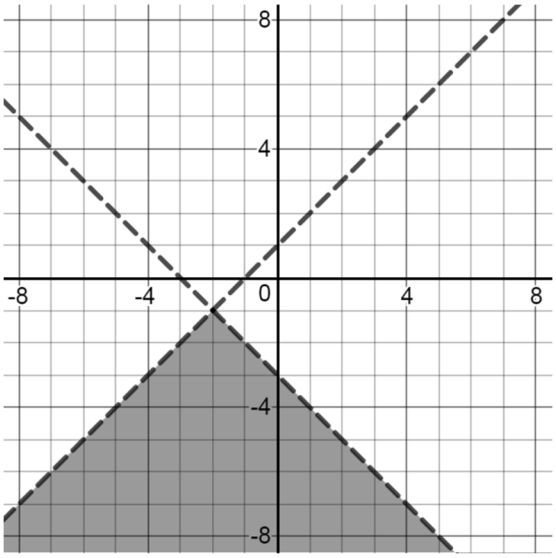
6. $\begin{cases} y \geq 4x + 1 \\ y \geq x - 2 \end{cases}$



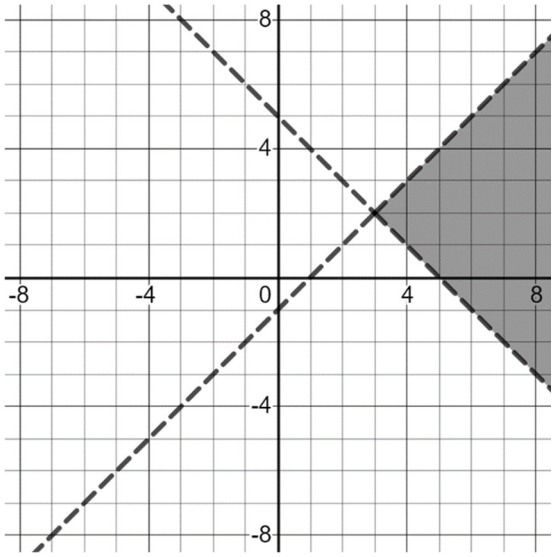
7. $\begin{cases} y \leq \frac{1}{3}x - 2 \\ y \leq 2x + 3 \end{cases}$



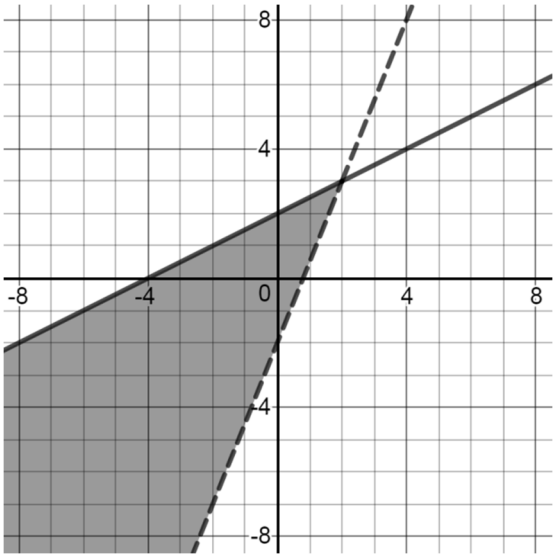
8. $\begin{cases} y < -x - 3 \\ y < x + 1 \end{cases}$



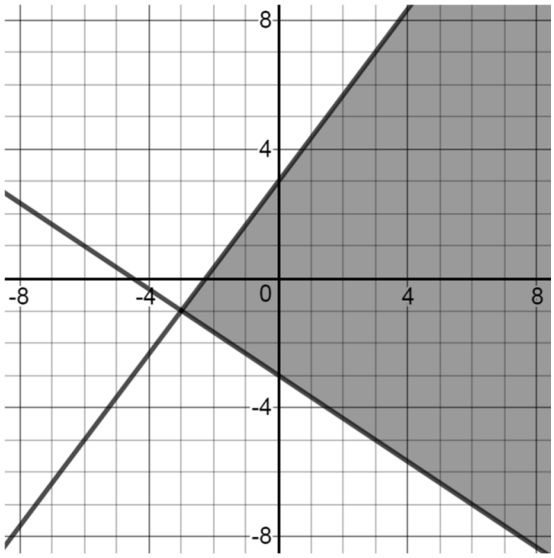
9. $\begin{cases} x + y > 5 \\ x - y > 1 \end{cases}$



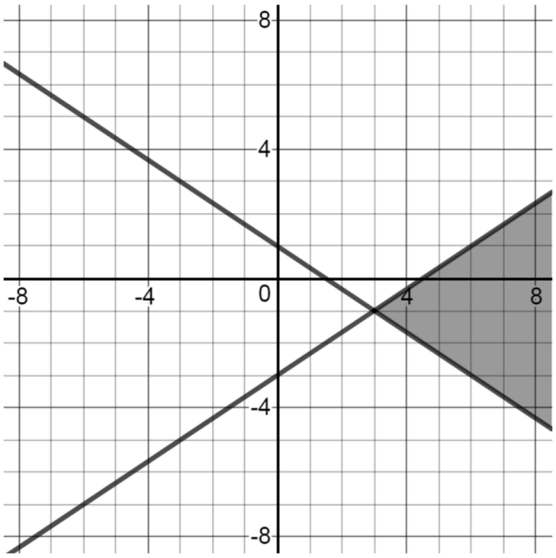
10. $\begin{cases} y \leq \frac{1}{2}x + 2 \\ y > \frac{5}{2}x - 2 \end{cases}$



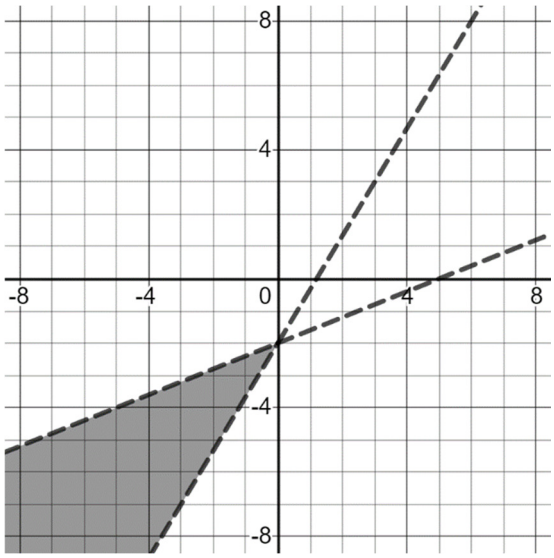
11. $\begin{cases} y \geq -\frac{2}{3}x - 3 \\ y \leq \frac{4}{3}x + 3 \end{cases}$



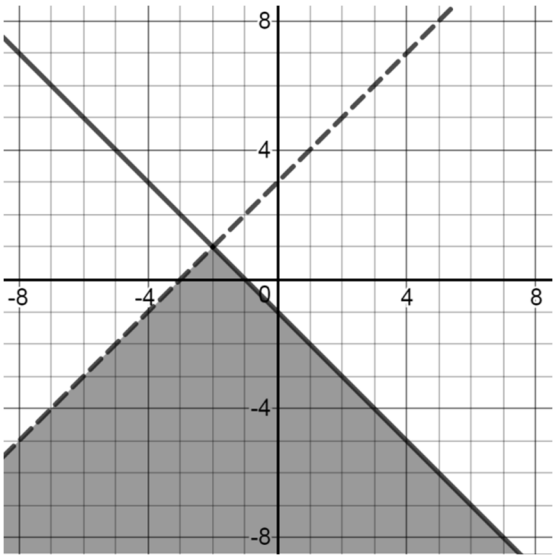
12. $\begin{cases} 2x + 3y \geq 3 \\ 2x - 3y \geq 9 \end{cases}$



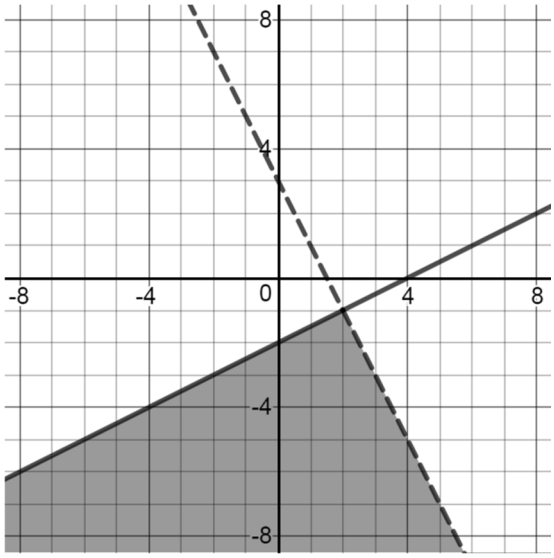
13. $\begin{cases} 5x - 3y < 6 \\ -2x + 5y < -10 \end{cases}$



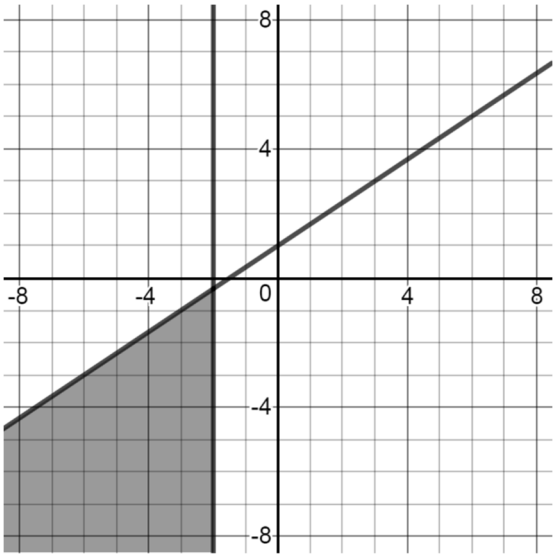
14. $\begin{cases} x - y > -3 \\ x + y \leq -1 \end{cases}$



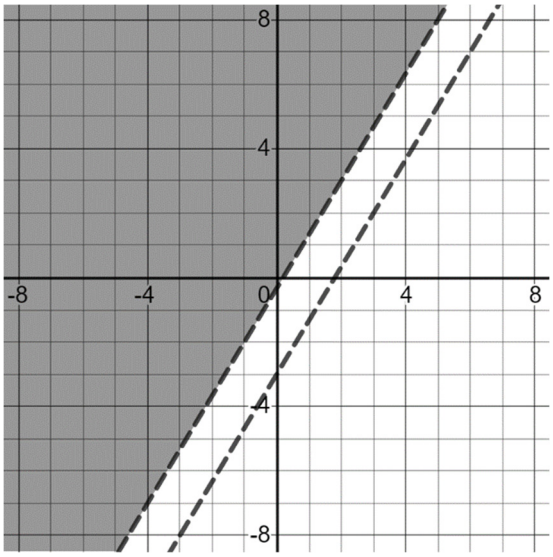
15. $\begin{cases} x - 2y \geq 4 \\ 2x + y < 3 \end{cases}$



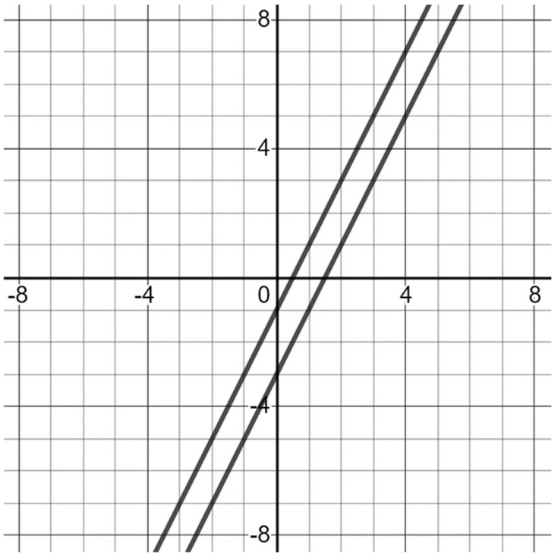
16. $\begin{cases} x \leq -3 \\ 2x - 3y \geq -3 \end{cases}$



17. $\begin{cases} 5x - 3y < 9 \\ y - 3 > \frac{5}{3}(x - 2) \end{cases}$

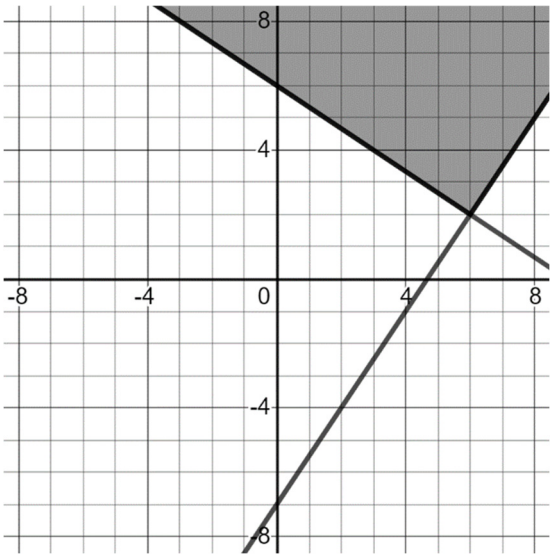


18. $\begin{cases} 2x - y \leq 1 \\ y - 1 \leq 2(x - 2) \end{cases}$



No solution exists

19. $\begin{cases} y - 2 \geq -\frac{2}{3}(x - 6) \\ y - 2 \geq \frac{3}{2}(x - 6) \end{cases}$



20. $\begin{cases} x + y < 1 \\ 0 \geq x + y + 1 \end{cases}$