

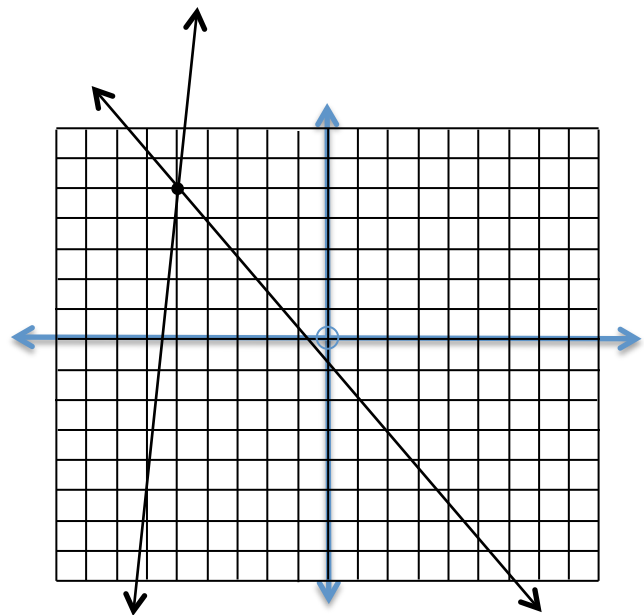
Instructions: Complete these problems for homework due on the date above. The problems should look very similar to those that were covered during our class meeting covering §5.7 & §6.1-6.3.

1. Solve, graph and give interval notation for the following:

a) $-5 - 2(1 + 2x) > 13$

b) $-9 \leq 4x + 3 < 7$

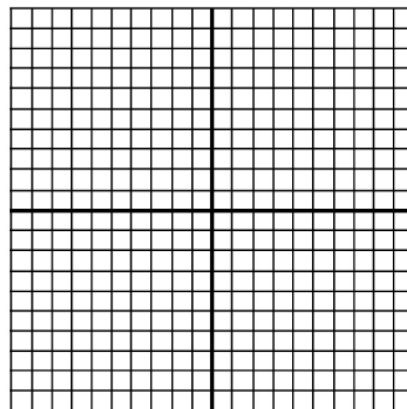
2. Find the solution to the system shown.
 Give the solution as an ordered pair.



3. Graph each of the equations on the same coordinate system and find the solution. Box the solution on the graph and give the solution as an ordered pair next to the equations.

$$y = -\frac{2}{3}x + \frac{1}{3}$$

$$x - 3y = -4$$



4. Solve the system using substitution. Give the solution as an ordered pair.
- $$\begin{aligned} 2x + 3y &= 5 \\ x + y &= 9 \end{aligned}$$

5. Solve the system using elimination. Give the solution as an ordered pair.
- $$\begin{aligned} 3x - 4y &= 44 \\ 5x + 2y &= 30 \end{aligned}$$

6. **T F** The system of equations given by $\begin{cases} y = x - 3 \\ y = x + 3 \end{cases}$ will have infinite solutions.

7. Explain your answer to #6.

8. Solve this special type of system.
- $$\begin{aligned} y &= 2(x - 3) + 1 \\ 2x - y &= 5 \end{aligned}$$