

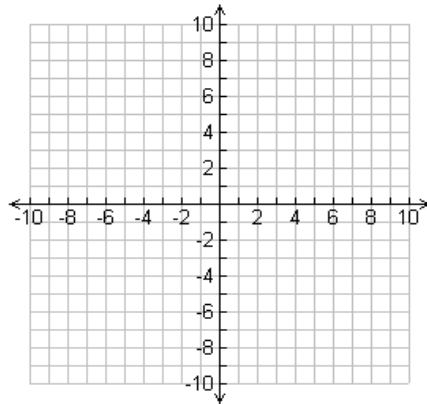
Name: _____

Challenge Worksheet Part 2

1) Look at #1 on Part 1 of the challenge worksheet (The bank account problem). Write a system of equations to represent the situation, then solve it this time using **substitution**. Make sure you get the same solution!

2) Solve the bonus problem from the last quiz: $\begin{cases} x + 4y = 16 \\ -2x - 3y = 38 \end{cases}$ First, get x by itself in the top equation. Then plug this in for x in the other equation and go from there.

3) For each equation, find **three** points that would make it true, then use them to graph both lines and find the point of intersection. $\begin{cases} -4x + 8y = 24 \\ 10x + 5y = 40 \end{cases}$



4) Solve #3 a different way: by getting y by itself on both equations, and then graphing. (For the top equation, you would first add 4x to both sides. Then you would divide all three terms by 8. Do a similar process for the bottom equation.)

$$\begin{cases} -4x + 8y = 24 \\ 10x + 5y = 40 \end{cases}$$

