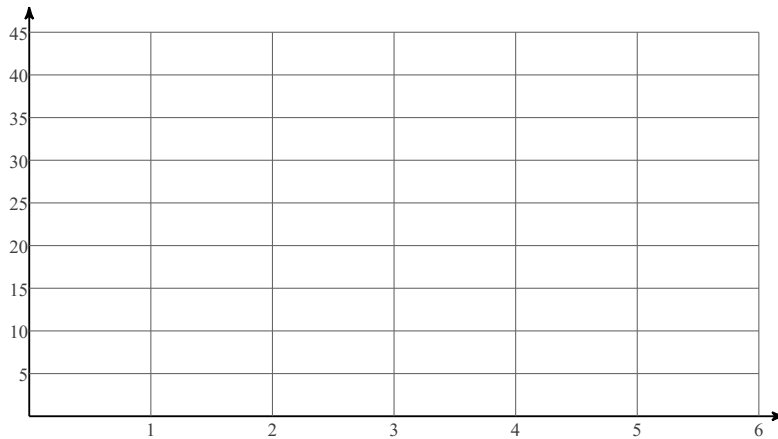


Solving Systems by Graphing - Class Notes Date _____ Period _____

Suppose you have \$20 in your bank account. You start saving \$5 each week. Your friend has \$5 in his account and is saving \$10 each week. Assume neither of you make any withdrawals.

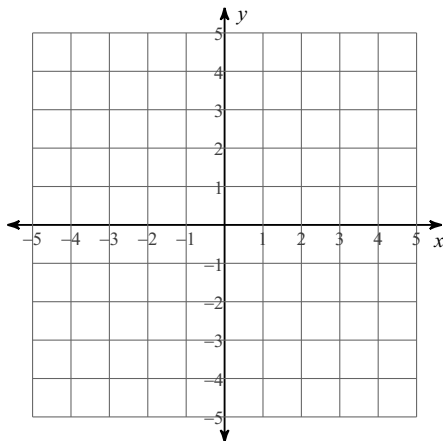
- 1) Write an equation that determines the balance in the account y , each week x for your account.
- 2) Write an equation that determines the balance in the account y , each week x for your friend's account.
- 3) Label each axis and graph the two equations on the grid below.



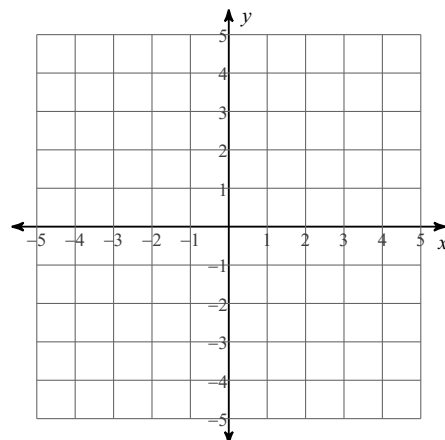
- 4) When will the accounts have the same balance?
- 5) Who will have more money after 2 weeks?
- 6) Who will have more money after 6 weeks?

Solve each system by graphing.

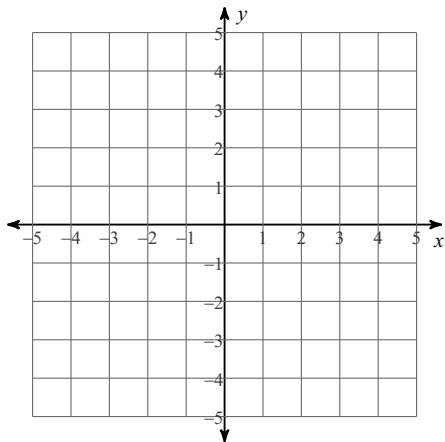
7) $y = 2x - 2$
 $y = -\frac{1}{2}x + 3$



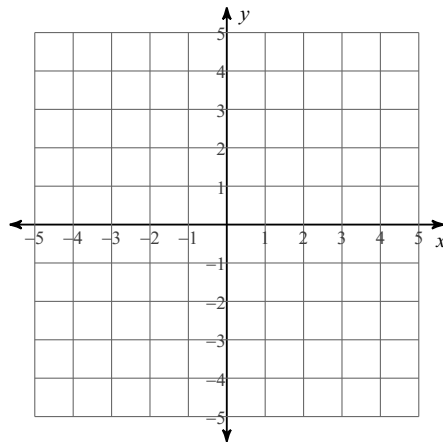
8) $y = 2x - 4$
 $y = 2x + 3$



9) $2x + 3y = -6$
 $-4x - 6y = 12$

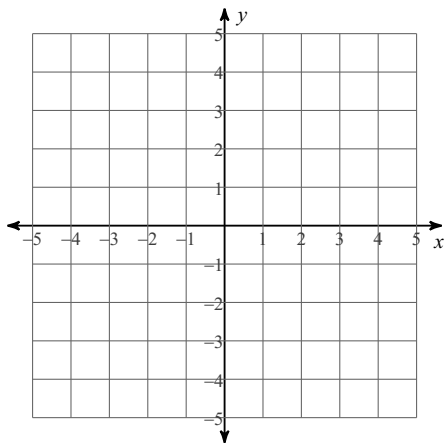


10) $x + 4y = -12$
 $3x - 4y = -4$

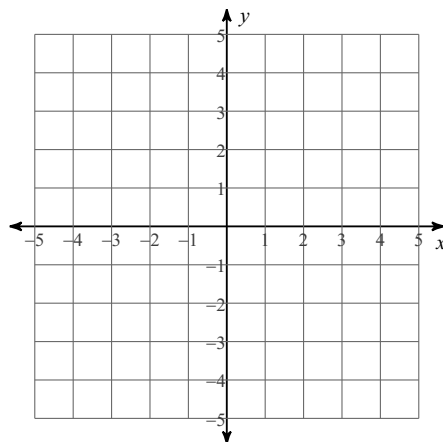


Sketch the solution to each system of inequalities.

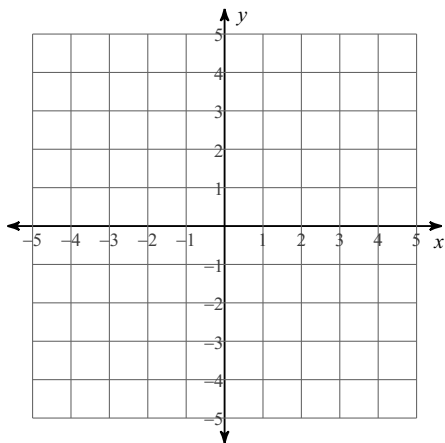
11) $y \geq -\frac{4}{3}x - 3$
 $y \leq \frac{1}{3}x + 2$



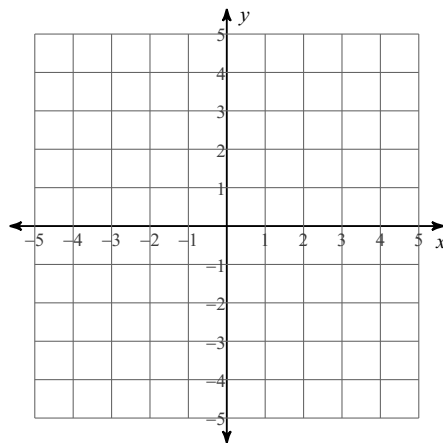
12) $y > -\frac{4}{3}x - 1$
 $x \geq -3$



13) $5x + 2y > 4$
 $x + 2y < -4$



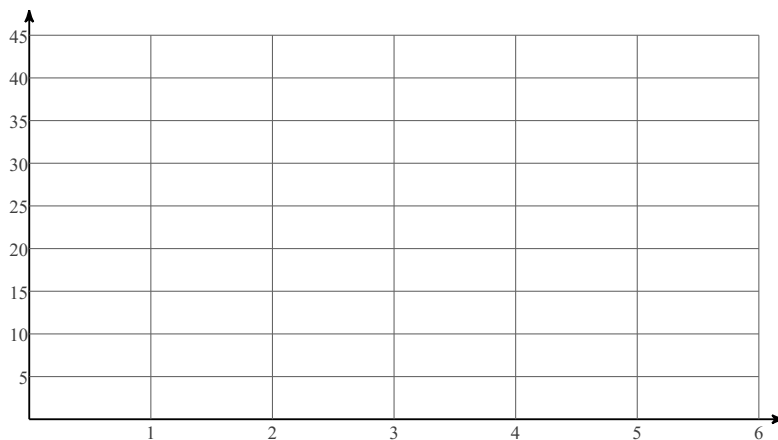
14) $3x - 2y \geq 2$
 $x + 2y < 6$



Solving Systems by Graphing - Class Notes Date _____ Period _____

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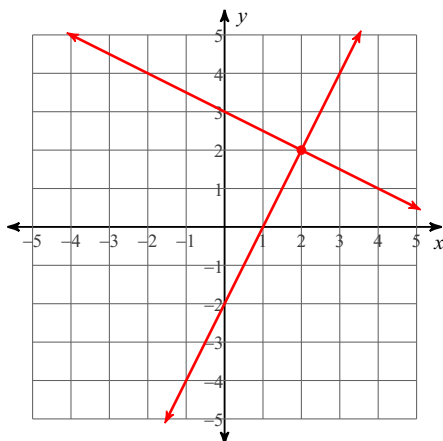
- 1) Write an equation that determines the balance in the account y , each week x for your account.
- 2) Write an equation that determines the balance in the account y , each week x for your friend's account.
- 3) Label each axis and graph the two equations on the grid below.



- 4) When will the accounts have the same balance?
- 5) Who will have more money after 2 weeks?
- 6) Who will have more money after 6 weeks?

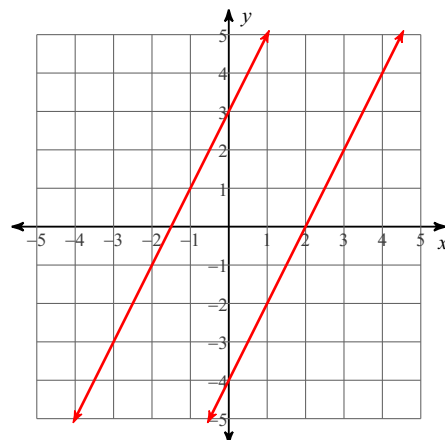
Solve each system by graphing.

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



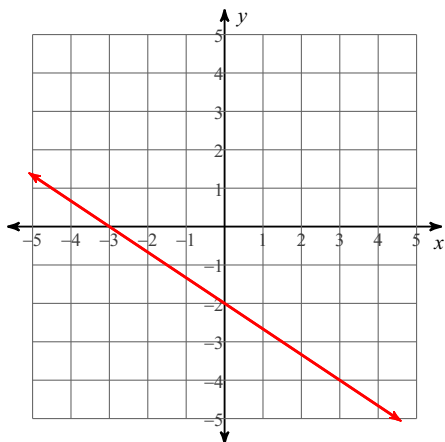
(2, 2)

8) $y = 2x - 4$
 $y = 2x + 3$

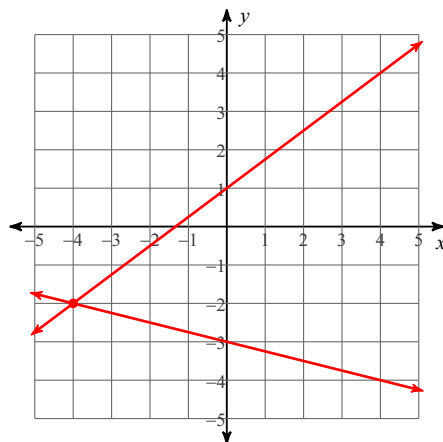


No solution

9) $2x + 3y = -6$
 $-4x - 6y = 12$



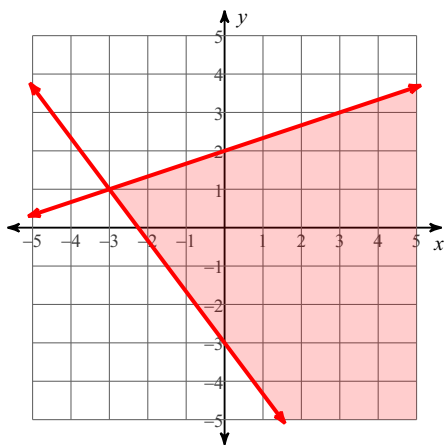
10) $x + 4y = -12$
 $3x - 4y = -4$



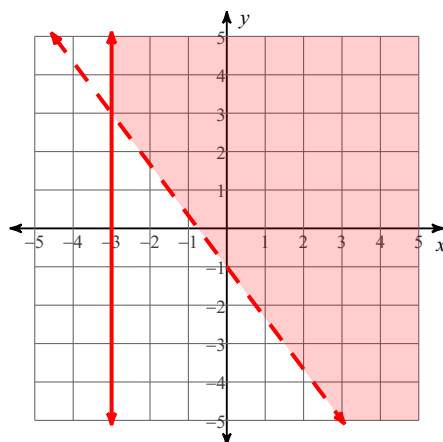
$(-4, -2)$

Sketch the solution to each system of inequalities.

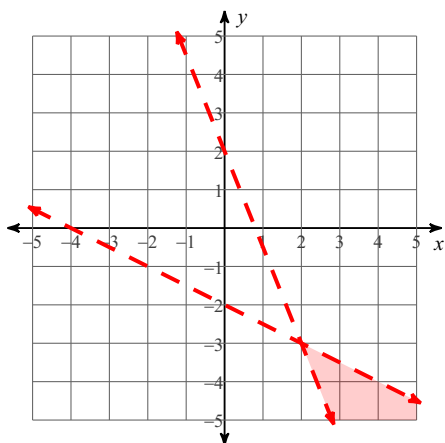
11) $y \geq -\frac{4}{3}x - 3$
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 $x + 2y < -4$



14) $3x - 2y \geq 2$
 $x + 2y < 6$

