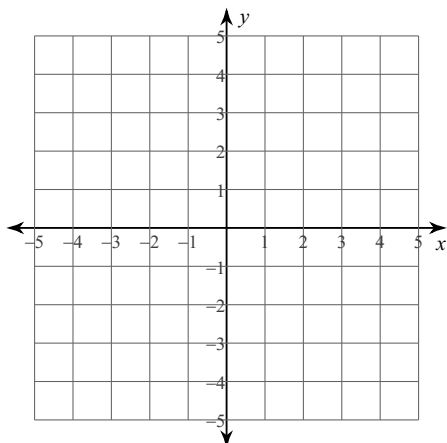


## Unit 3 Review

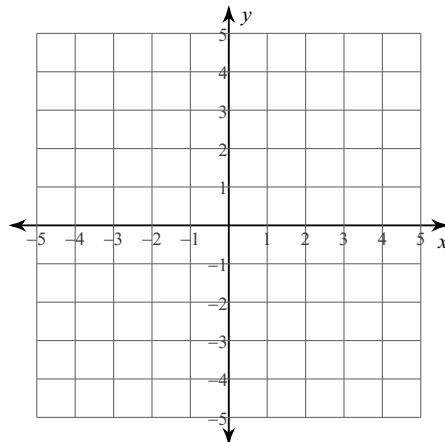
**Solve each system by graphing.**

1)  $y = \frac{7}{3}x - 4$

$y = -\frac{1}{3}x + 4$



2)  $2x + y = -2$   
 $x + 3y = 9$

**Solve each system by substitution.**

3)  $7x - y = 14$   
 $y = 7$

4)  $-5x - 3y = -21$   
 $x + 6y = 15$

**Solve each system by elimination.**

5)  $-9x + 10y = -20$   
 $9x - 7y = 14$

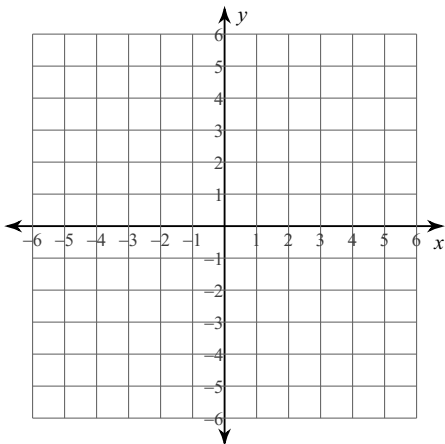
6)  $2x - 3y = -20$   
 $-5x + y = 11$

7) Rob and Abhasra are selling pies for a school fundraiser. Customers can buy apple pies and blackberry pies. Rob sold 10 apple pies and 9 blackberry pies for a total of \$250. Abhasra sold 5 apple pies and 3 blackberry pies for a total of \$95. Find the cost each of one apple pie and one blackberry pie.

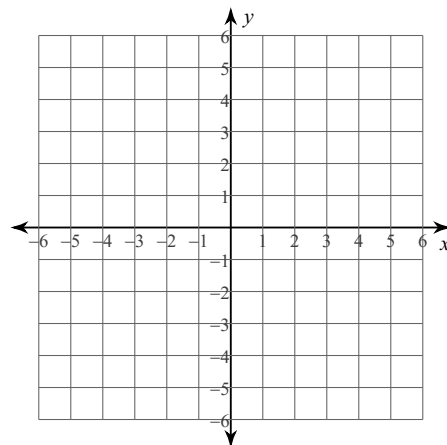
8) Jose's school is selling tickets to a fall musical. On the first day of ticket sales the school sold 8 senior citizen tickets and 9 child tickets for a total of \$96. The school took in \$36 on the second day by selling 4 senior citizen tickets and 3 child tickets. What is the price each of one senior citizen ticket and one child ticket?

**Sketch the graph of each linear inequality.**

9)  $y > \frac{3}{2}x - 4$



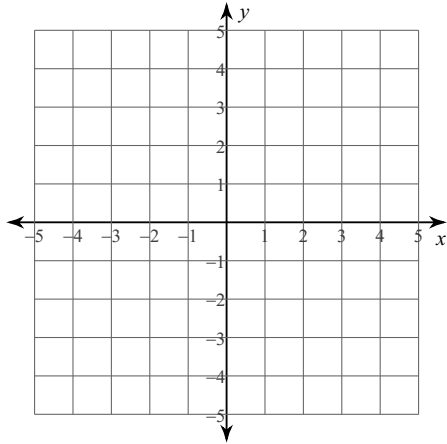
10)  $x - 3y < -3$



Sketch the solution to each system of inequalities.

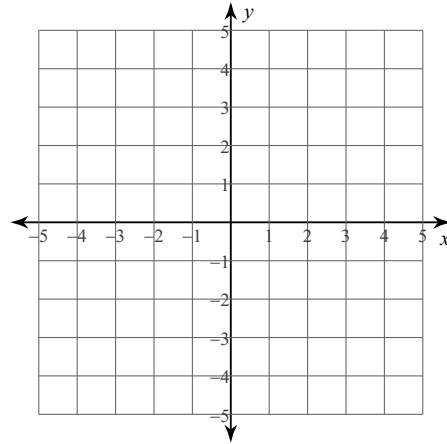
11)  $y \geq -\frac{2}{3}x - 1$

$y \geq \frac{2}{3}x + 3$

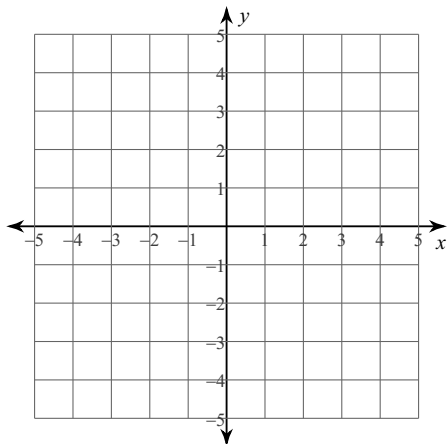


12)  $y < \frac{1}{2}x + 2$

$y \leq -\frac{3}{2}x - 2$



13)  $2x + y < 1$   
 $x - y > 2$



14)  $5x + 2y < 6$   
 $5x + 2y \geq -2$

