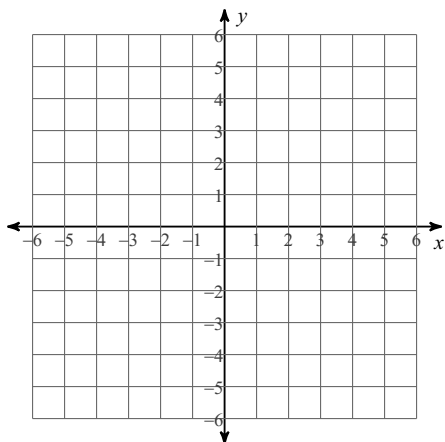


## Unit 4 Review

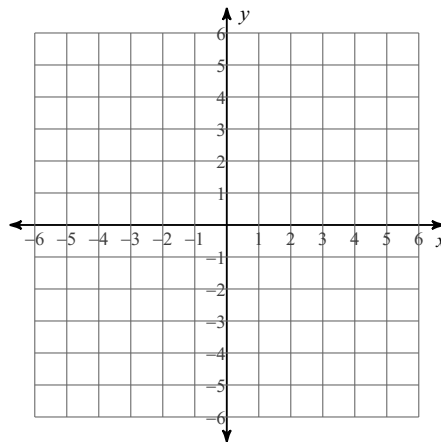
Date \_\_\_\_\_ Period \_\_\_\_\_

**Sketch the graph of each line.**

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



2)  $2x - 3y = 9$

**Find the slope of the line through each pair of points.**

3)  $(3, -2), (3, -10)$

4)  $(9, -7), (13, -10)$

**Write the slope-intercept form of the equation of the line through the given point with the given slope.**

5) through:  $(3, -1)$ , slope =  $\frac{1}{3}$

6) through:  $(2, 1)$ , slope = 3

Write the slope-intercept form of the equation of the line described.

7) through:  $(-5, 3)$ , parallel to  $y = -2x$

8) through:  $(1, 5)$ , perp. to  $y = -\frac{1}{2}x - 2$

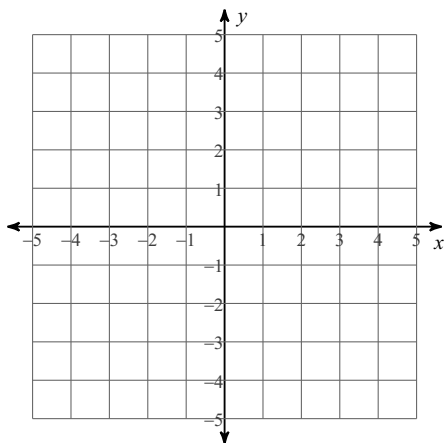
Write the slope-intercept form of the equation of the line through the given points.

9) through:  $(-3, 5)$  and  $(-4, -2)$

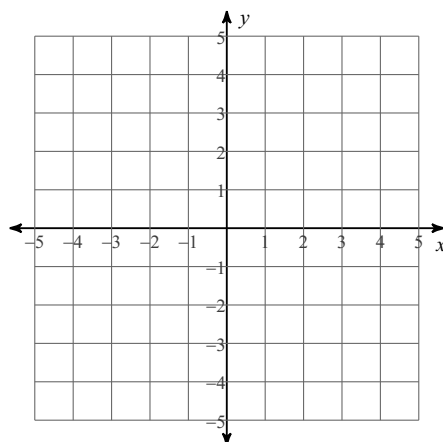
10) through:  $(4, 1)$  and  $(8, -2)$

Solve each system by graphing.

11)  $y = x - 4$   
 $y = -2x + 2$



12)  $y = \frac{1}{2}x - 1$   
 $y = -\frac{1}{4}x + 2$



**Solve each system by substitution.**

13)  $y = 5x - 9$   
 $y = 2x - 6$

14)  $y = 2x + 13$   
 $2x + 3y = 7$

**Solve each system by elimination.**

15)  $6x - 2y = 14$   
 $-6x - 2y = 2$

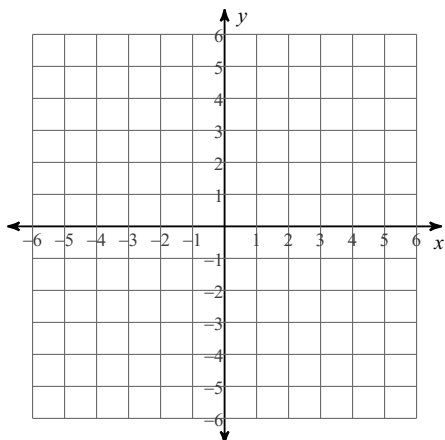
16)  $-9x - 4y = 15$   
 $3x + 2y = -3$

**Write a system of equations that could be used to solve the problem and solve the system of equations to answer the question.**

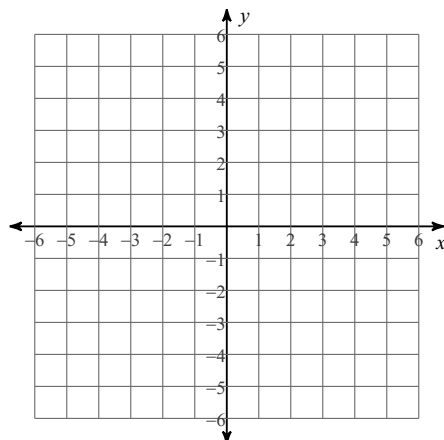
- 17) The school that Darryl goes to is selling tickets to a spring musical. On the first day of ticket sales the school sold 7 adult tickets and 9 child tickets for a total of \$171. The school took in \$147 on the second day by selling 7 adult tickets and 7 child tickets. Find the price of an adult ticket and the price of a child ticket.

Sketch the graph of each linear inequality.

18)  $y \geq -3x - 3$



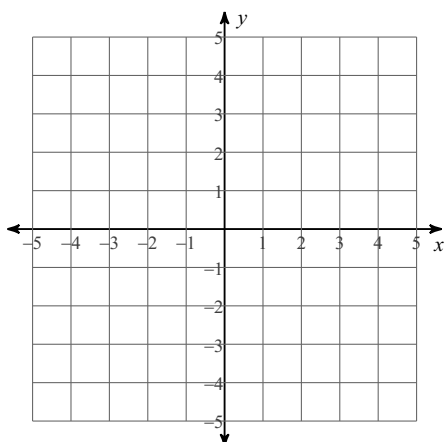
19)  $4x - 3y < 12$



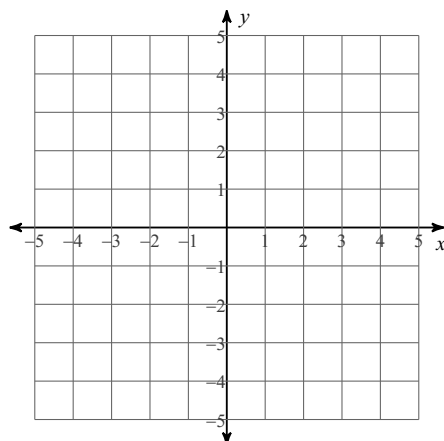
Sketch the solution to each system of inequalities.

20)  $y \geq -\frac{4}{3}x - 3$

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

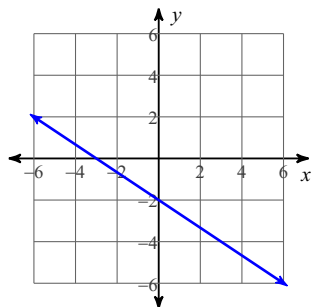


21)  $2x - y > -3$   
 $4x + y > -3$

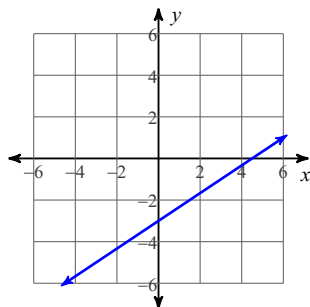


# Answers to Unit 4 Review (ID: 1)

1)



2)



3) Undefined

4)  $-\frac{3}{4}$

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

6)  $y = 3x - 5$

7)  $y = -2x - 7$

8)  $y = 2x + 3$

9)  $y = 7x + 26$

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

11)  $(2, -2)$

12)  $(4, 1)$

13)  $(1, -4)$

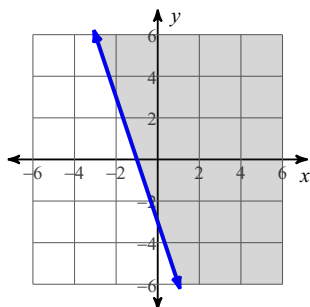
14)  $(-4, 5)$

15)  $(1, -4)$

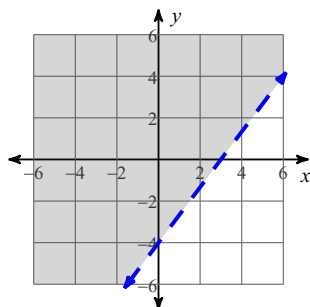
16)  $(-3, 3)$

17) adult ticket: \$9, child ticket: \$12

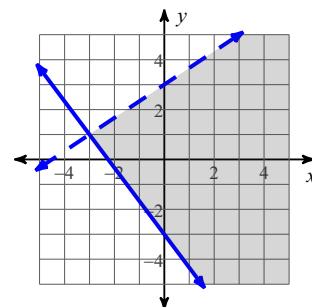
18)



19)



20)



21)

