

## Unit 20 Review

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

**Solve each equation.**

1)  $-10 = -4n - 6n$

2)  $-6a + 4 + 1 = 5$

3)  $0 = 6 + 2x + 6$

4)  $5 = 4x - 2 - 5$

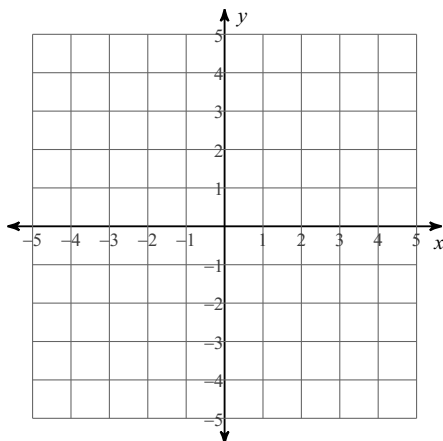
5)  $12 - 6n = -3(n - 7)$

6)  $4(k - 6) = -16 + 5k$

**Solve each system by graphing.**

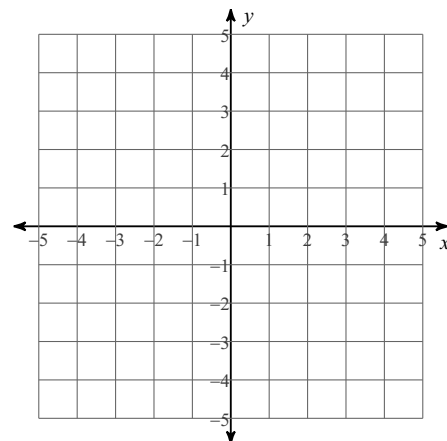
7)  $y = \frac{7}{3}x + 3$

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

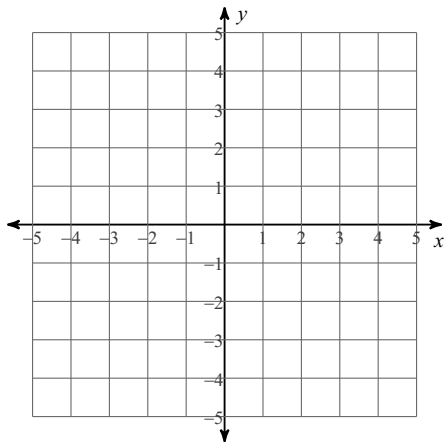


8)  $y = \frac{1}{4}x + 2$

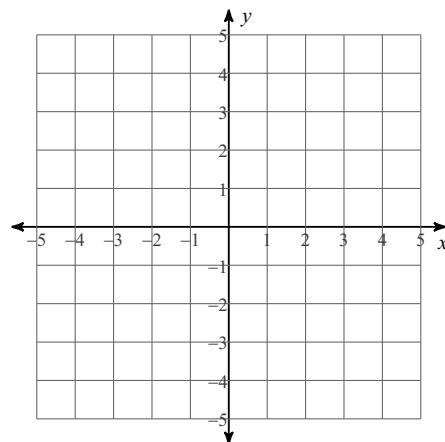
$y = -\frac{3}{4}x - 2$



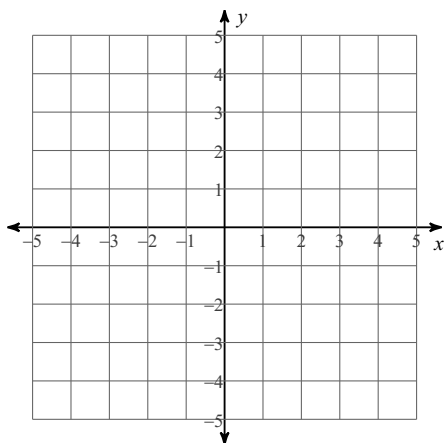
9)  $y = -4x + 1$   
 $y = -4x - 1$



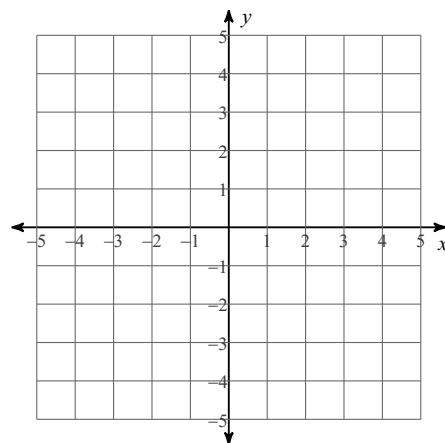
10)  $y = \frac{5}{2}x - 4$   
 $y = -x + 3$



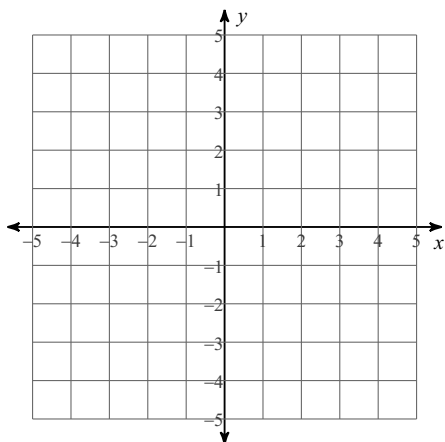
11)  $2x + y = 3$   
 $5x - y = 4$



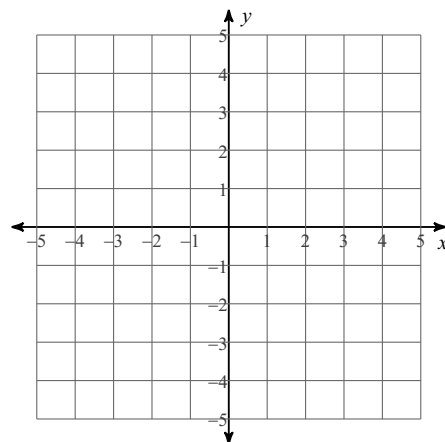
12)  $3x + 2y = 8$   
 $x + 4y = -4$



13)  $x - 2y = -2$   
 $3x - y = 4$



14)  $3x + 4y = -16$   
 $5x - 4y = -16$



**Solve each system by substitution.**

$$\begin{aligned} 15) \quad y &= -5x + 6 \\ y &= -4x + 4 \end{aligned}$$

$$\begin{aligned} 16) \quad y &= 1 \\ y &= x + 5 \end{aligned}$$

$$\begin{aligned} 17) \quad y &= 4x - 9 \\ y &= 8x - 13 \end{aligned}$$

$$\begin{aligned} 18) \quad y &= -3x - 1 \\ y &= -4x - 3 \end{aligned}$$

$$\begin{aligned} 19) \quad y &= 5x - 14 \\ 2x - y &= 5 \end{aligned}$$

$$\begin{aligned} 20) \quad -2x - 6y &= -4 \\ y &= x - 10 \end{aligned}$$

$$\begin{aligned} 21) \quad y &= -8x + 6 \\ -3x - 2y &= -12 \end{aligned}$$

$$\begin{aligned} 22) \quad y &= -2x + 7 \\ 4x + 2y &= 14 \end{aligned}$$

**Extra Credit! (1 pt for each correct answers)**

23) The sum of two numbers is 17. Their difference is 1. Find the numbers.

24) The difference of two numbers is 2. Their sum is 14. What are the numbers?

25) The difference of two numbers is 4. Their sum is 14. What are the numbers?

26) The difference of two numbers is 3. Their sum is 13. What are the numbers?

27) Nicole and Elisa are selling wrapping paper for a school fundraiser. Customers can buy rolls of plain wrapping paper and rolls of holiday wrapping paper. Nicole sold 2 rolls of plain wrapping paper and 12 rolls of holiday wrapping paper for a total of \$236. Elisa sold 2 rolls of plain wrapping paper and 4 rolls of holiday wrapping paper for a total of \$100. What is the cost each of one roll of plain wrapping paper and one roll of holiday wrapping paper?