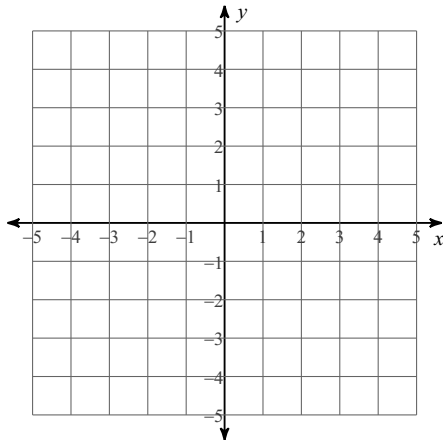


Systems of Equations - TEST REVIEW

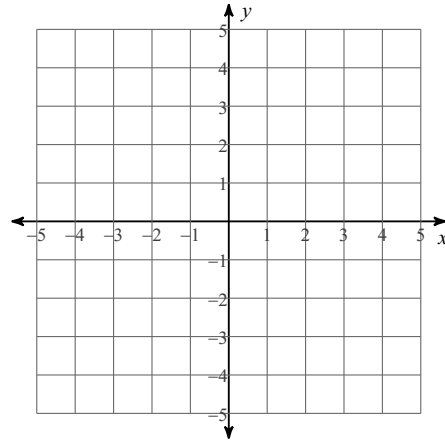
Solve each system by graphing.

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

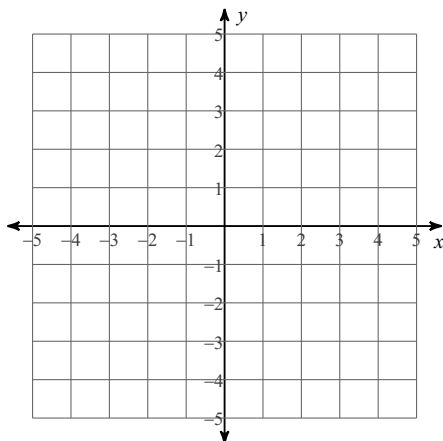
$y = \frac{1}{4}x + 3$



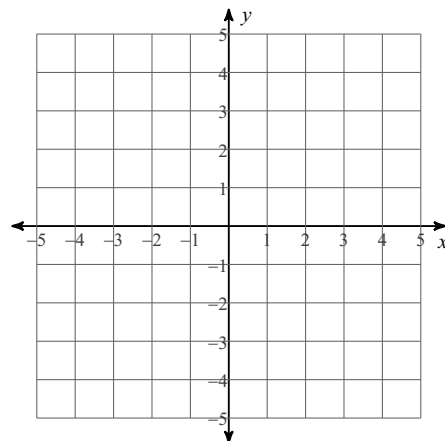
2) $y = x + 3$
 $y = 6x - 2$



3) $3x + y = 1$
 $3x + y = -2$



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



Solve each system by substitution. Show your work on a separate sheet of paper.

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

6) $y = 5x - 8$
 $5x - y = 8$

$$\begin{aligned} 7) \quad y &= -2x + 11 \\ -2x - 5y &= 1 \end{aligned}$$

$$\begin{aligned} 8) \quad 4x - 6y &= 14 \\ -4x + y &= -19 \end{aligned}$$

Solve each system by elimination. Show your work on a separate sheet of paper.

$$\begin{aligned} 9) \quad 4x + 10y &= 4 \\ -3x - 10y &= -8 \end{aligned}$$

$$\begin{aligned} 10) \quad -6x + 2y &= -30 \\ -3x + 2y &= -6 \end{aligned}$$

$$\begin{aligned} 11) \quad 2x + 3y &= 7 \\ 2x + 3y &= 3 \end{aligned}$$

$$\begin{aligned} 12) \quad -3x - 4y &= 3 \\ x + 7y &= -1 \end{aligned}$$

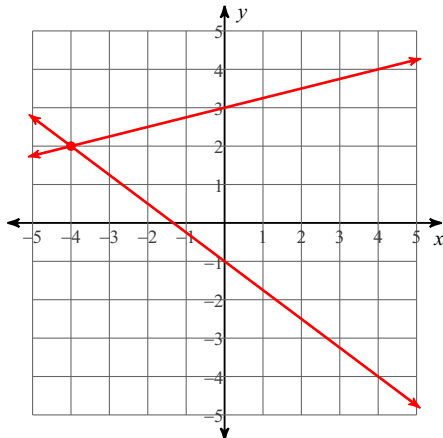
- 13) Stephanie and Castel each improved their yards by planting daylilies and geraniums. They bought their supplies from the same store. Stephanie spent \$48 on 6 daylilies and 6 geraniums. Castel spent \$38 on 1 daylily and 6 geraniums. Find the cost of one daylily and the cost of one geranium.
- 14) Totsakan and Shayna are selling cheesecakes for a school fundraiser. Customers can buy French silk cheesecakes and chocolate marble cheesecakes. Totsakan sold 8 French silk cheesecakes and 1 chocolate marble cheesecake for a total of \$75. Shayna sold 8 French silk cheesecakes and 3 chocolate marble cheesecakes for a total of \$113. Find the cost each of one French silk cheesecake and one chocolate marble cheesecake.
- 15) The school that Jack goes to is selling tickets to the annual dance competition. On the first day of ticket sales the school sold 5 adult tickets and 14 student tickets for a total of \$159. The school took in \$222 on the second day by selling 10 adult tickets and 12 student tickets. Find the price of an adult ticket and the price of a student ticket.
- 16) Scott and Sarawong are selling wrapping paper for a school fundraiser. Customers can buy rolls of plain wrapping paper and rolls of shiny wrapping paper. Scott sold 5 rolls of plain wrapping paper and 7 rolls of shiny wrapping paper for a total of \$126. Sarawong sold 7 rolls of plain wrapping paper and 14 rolls of shiny wrapping paper for a total of \$231. What is the cost each of one roll of plain wrapping paper and one roll of shiny wrapping paper?

Systems of Equations - TEST REVIEW

Solve each system by graphing.

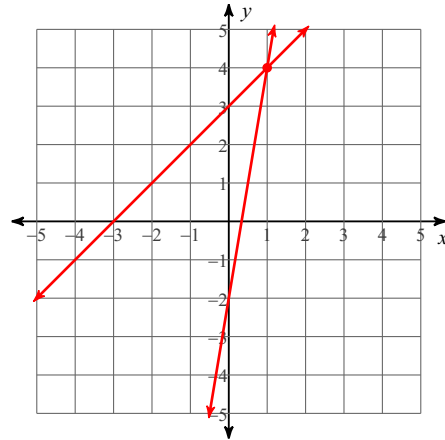
1) $y = -\frac{3}{4}x - 1$

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



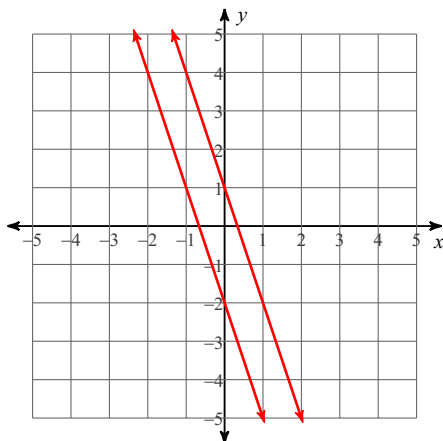
$(-4, 2)$

2) $y = x + 3$
 $y = 6x - 2$



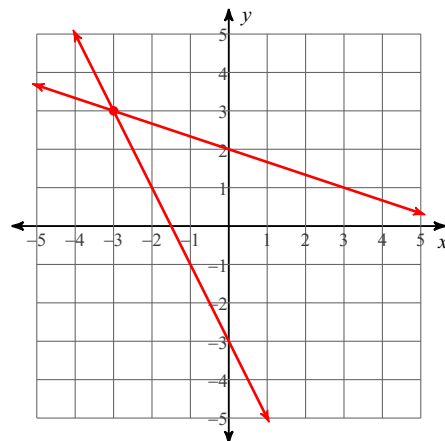
$(1, 4)$

3) $3x + y = 1$
 $3x + y = -2$



No solution

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



$(-3, 3)$

Solve each system by substitution. Show your work on a separate sheet of paper.

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

$(1, -8)$

6) $y = 5x - 8$
 $5x - y = 8$

Infinite number of solutions

$$\begin{aligned} 7) \quad y &= -2x + 11 \\ -2x - 5y &= 1 \end{aligned}$$

$$(7, -3)$$

$$\begin{aligned} 8) \quad 4x - 6y &= 14 \\ -4x + y &= -19 \end{aligned}$$

$$(5, 1)$$

Solve each system by elimination. Show your work on a separate sheet of paper.

$$\begin{aligned} 9) \quad 4x + 10y &= 4 \\ -3x - 10y &= -8 \end{aligned}$$

$$(-4, 2)$$

$$\begin{aligned} 10) \quad -6x + 2y &= -30 \\ -3x + 2y &= -6 \end{aligned}$$

$$(8, 9)$$

$$\begin{aligned} 11) \quad 2x + 3y &= 7 \\ 2x + 3y &= 3 \end{aligned}$$

No solution

$$\begin{aligned} 12) \quad -3x - 4y &= 3 \\ x + 7y &= -1 \end{aligned}$$

$$(-1, 0)$$

- 13) Stephanie and Castel each improved their yards by planting daylilies and geraniums. They bought their supplies from the same store. Stephanie spent \$48 on 6 daylilies and 6 geraniums. Castel spent \$38 on 1 daylily and 6 geraniums. Find the cost of one daylily and the cost of one geranium.

daylily: \$2, geranium: \$6

- 14) Totsakan and Shayna are selling cheesecakes for a school fundraiser. Customers can buy French silk cheesecakes and chocolate marble cheesecakes. Totsakan sold 8 French silk cheesecakes and 1 chocolate marble cheesecake for a total of \$75. Shayna sold 8 French silk cheesecakes and 3 chocolate marble cheesecakes for a total of \$113. Find the cost each of one French silk cheesecake and one chocolate marble cheesecake.

French silk cheesecake: \$7, chocolate marble cheesecake: \$19

- 15) The school that Jack goes to is selling tickets to the annual dance competition. On the first day of ticket sales the school sold 5 adult tickets and 14 student tickets for a total of \$159. The school took in \$222 on the second day by selling 10 adult tickets and 12 student tickets. Find the price of an adult ticket and the price of a student ticket.

adult ticket: \$15, student ticket: \$6

- 16) Scott and Sarawong are selling wrapping paper for a school fundraiser. Customers can buy rolls of plain wrapping paper and rolls of shiny wrapping paper. Scott sold 5 rolls of plain wrapping paper and 7 rolls of shiny wrapping paper for a total of \$126. Sarawong sold 7 rolls of plain wrapping paper and 14 rolls of shiny wrapping paper for a total of \$231. What is the cost each of one roll of plain wrapping paper and one roll of shiny wrapping paper?

roll of plain wrapping paper: \$7, roll of shiny wrapping paper: \$13