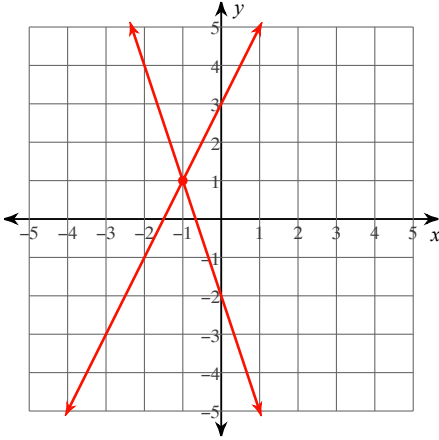


## Assignment

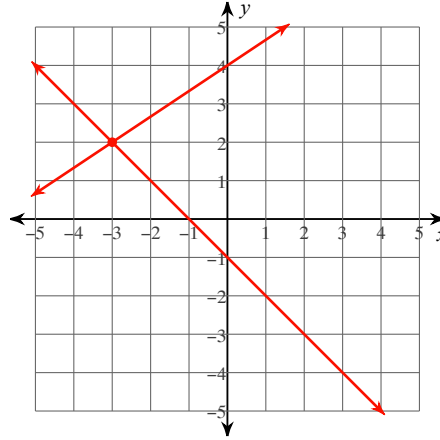
Date \_\_\_\_\_ Period \_\_\_\_\_

Solve each system by graphing.

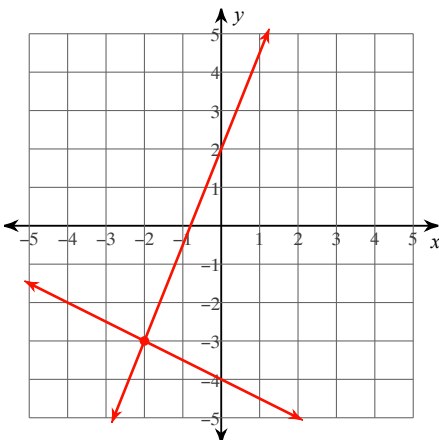
$$\begin{aligned} 1) \quad & 3x + y = -2 \\ & 2x - y = -3 \end{aligned}$$

 $(-1, 1)$ 

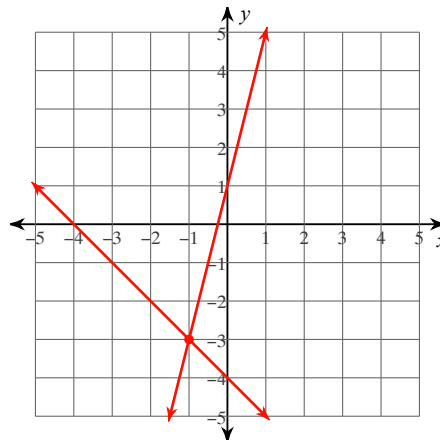
$$\begin{aligned} 2) \quad & x + y = -1 \\ & 2x - 3y = -12 \end{aligned}$$

 $(-3, 2)$ 

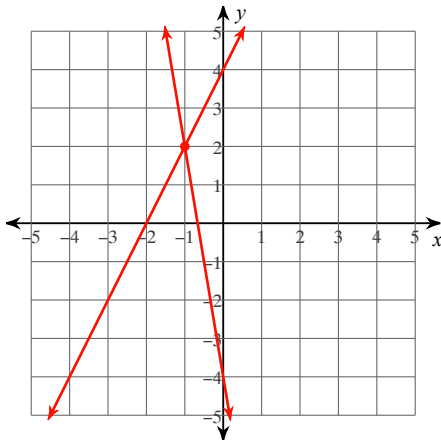
$$\begin{aligned} 3) \quad & y = -\frac{1}{2}x - 4 \\ & y = \frac{5}{2}x + 2 \end{aligned}$$

 $(-2, -3)$ 

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

 $(-1, -3)$

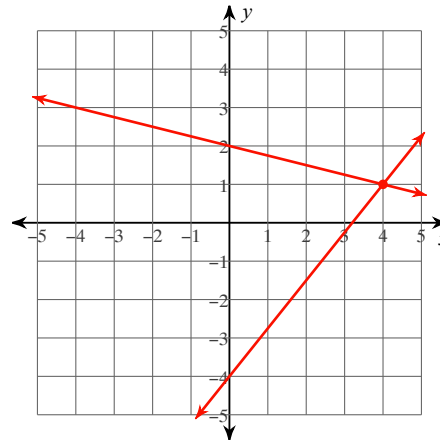
5)  $y = -6x - 4$   
 $y = 2x + 4$



$(-1, 2)$

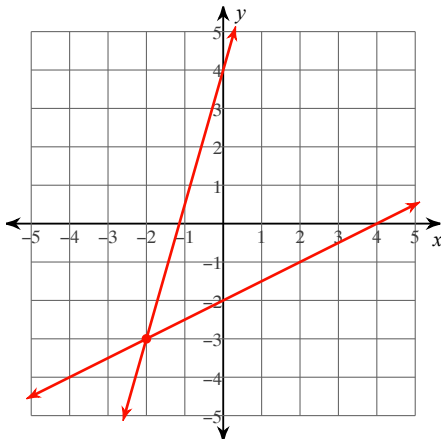
6)  $y = -\frac{1}{4}x + 2$

$y = \frac{5}{4}x - 4$



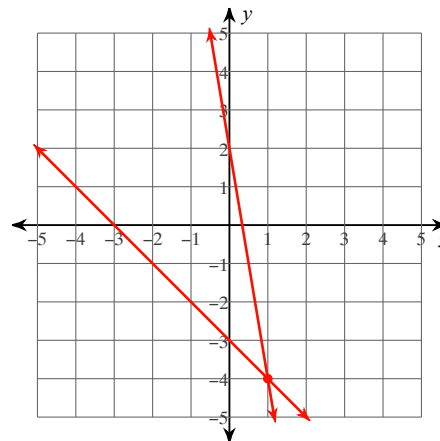
$(4, 1)$

7)  $y = \frac{7}{2}x + 4$   
 $y = \frac{1}{2}x - 2$



$(-2, -3)$

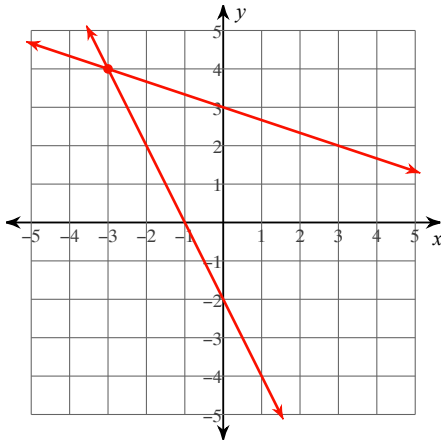
8)  $y = -x - 3$   
 $y = -6x + 2$



$(1, -4)$

$$9) y = -\frac{1}{3}x + 3$$

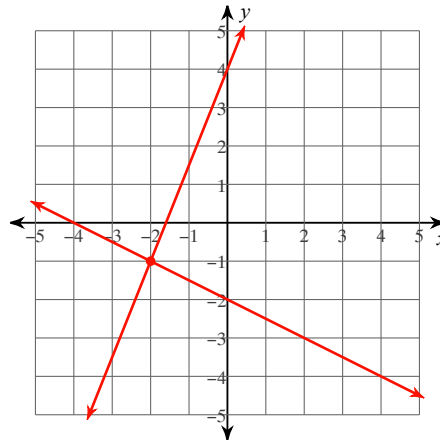
$$y = -2x - 2$$



$(-3, 4)$

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

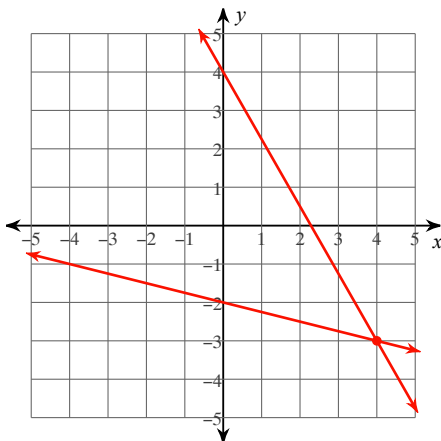
$$y = -\frac{1}{2}x - 2$$



$(-2, -1)$

$$11) y = -\frac{1}{4}x - 2$$

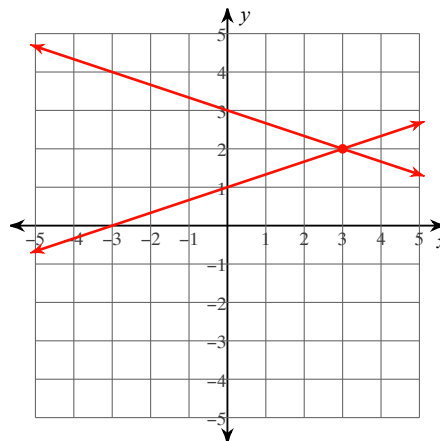
$$y = -\frac{7}{4}x + 4$$



$(4, -3)$

$$12) y = -\frac{1}{3}x + 3$$

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



$(3, 2)$

**Solve each system by substitution.**

$$13) y = 4x - 17$$

$$3x - 4y = 3$$

$(5, 3)$

$$14) 2x + 7y = -11$$

$$y = -5x + 22$$

$(5, -3)$

$$15) y = -3x - 3$$

$$-6x - y = 6$$

$(-1, 0)$

$$16) 8x - 5y = -15$$

$$y = 2x + 3$$

$(0, 3)$

$$17) \begin{aligned} y &= x + 1 \\ y &= 5x + 5 \\ (-1, 0) \end{aligned}$$

$$18) \begin{aligned} y &= x + 2 \\ y &= -5 \\ (-7, -5) \end{aligned}$$

$$19) \begin{aligned} y &= 6x + 3 \\ y &= 3x + 3 \\ (0, 3) \end{aligned}$$

$$20) \begin{aligned} y &= -4x + 3 \\ y &= 7x - 19 \\ (2, -5) \end{aligned}$$

$$21) \begin{aligned} x - 3y &= 16 \\ 3x - 2y &= 20 \\ (4, -4) \end{aligned}$$

$$22) \begin{aligned} x - 3y &= -1 \\ 8x - 6y &= -8 \\ (-1, 0) \end{aligned}$$

$$23) \begin{aligned} -6x - 7y &= 9 \\ 4x + y &= 5 \\ (2, -3) \end{aligned}$$

$$24) \begin{aligned} 3x - 6y &= 15 \\ -4x + y &= -20 \\ (5, 0) \end{aligned}$$

25) The county fair is a popular field trip destination. This year the senior class at High School A and the senior class at High School B both planned trips there. The senior class at High School A rented and filled 7 vans and 2 buses with 244 students. High School B rented and filled 8 vans and 2 buses with 262 students. Every van had the same number of students in it as did the buses. Find the number of students in each van and in each bus.

Van: 18, Bus: 59

26) Traveling downstream a certain boat went 12 km/h. Traveling upstream it only went 2 km/h. Find the current and the speed of the boat if there were no current.

Boat: 7 km/h, Current: 5 km/h

27) The senior classes at High School A and High School B planned separate trips to the state fair. The senior class at High School A rented and filled 7 vans and 2 buses with 230 students. High School B rented and filled 7 vans and 6 buses with 438 students. Each van and each bus carried the same number of students. Find the number of students in each van and in each bus.

Van: 18, Bus: 52

28) The senior classes at High School A and High School B planned separate trips to the water park. The senior class at High School A rented and filled 6 vans and 4 buses with 198 students. High School B rented and filled 6 vans and 5 buses with 225 students. Each van and each bus carried the same number of students. How many students can a van carry? How many students can a bus carry?

Van: 15, Bus: 27

29) The school that John goes to is selling tickets to the annual dance competition. On the first day of ticket sales the school sold 7 adult tickets and 8 student tickets for a total of \$225. The school took in \$210 on the second day by selling 6 adult tickets and 8 student tickets. What is the price each of one adult ticket and one student ticket?

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

30) Beth and Bill are selling wrapping paper for a school fundraiser. Customers can buy rolls of plain wrapping paper and rolls of shiny wrapping paper. Beth sold 7 rolls of plain wrapping paper and 7 rolls of shiny wrapping paper for a total of \$147. Bill sold 7 rolls of plain wrapping paper and 8 rolls of shiny wrapping paper for a total of \$161. Find 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: \$14