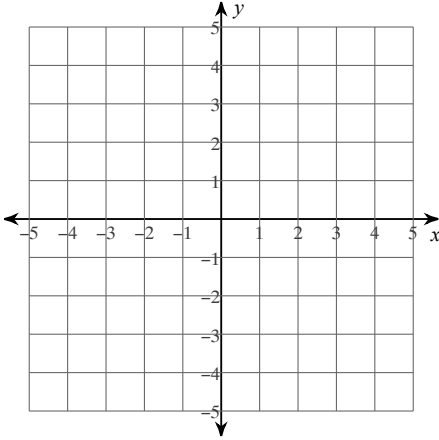


Assignment

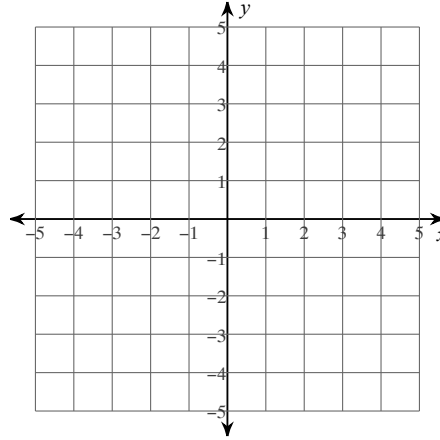
Date _____ Period _____

Solve each system by graphing.

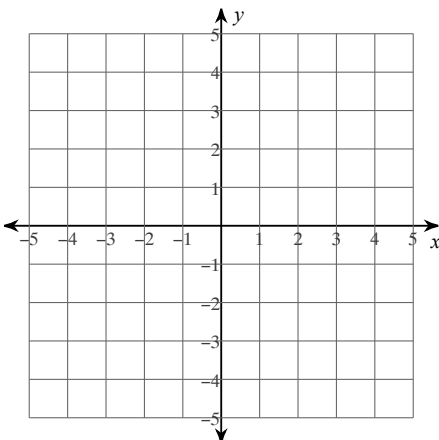
$$1) \begin{cases} 3x + y = -2 \\ 2x - y = -3 \end{cases}$$



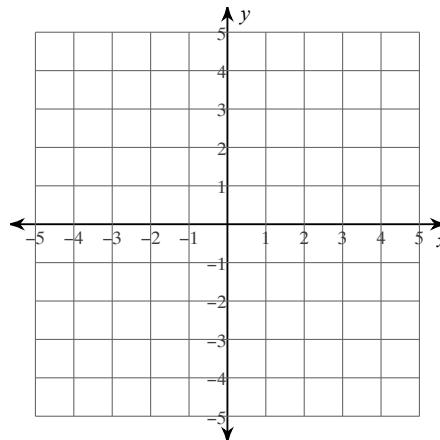
$$2) \begin{cases} x + y = -1 \\ 2x - 3y = -12 \end{cases}$$



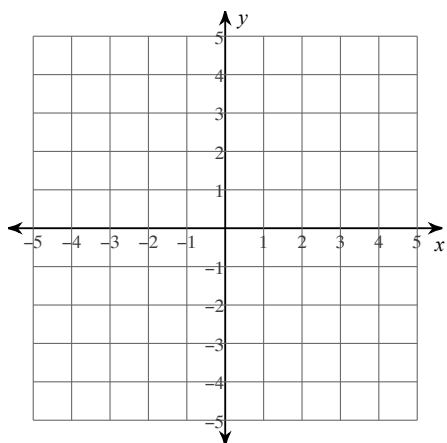
$$3) \begin{cases} y = -\frac{1}{2}x - 4 \\ y = \frac{5}{2}x + 2 \end{cases}$$



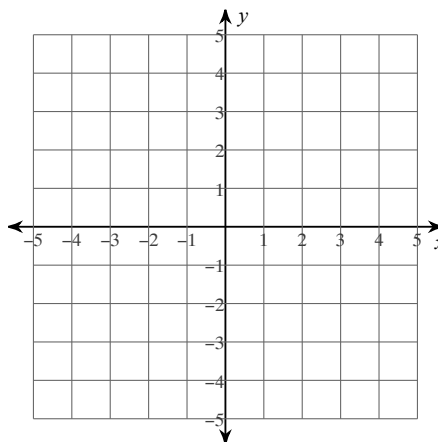
$$4) \begin{cases} y = 4x + 1 \\ y = -x - 4 \end{cases}$$



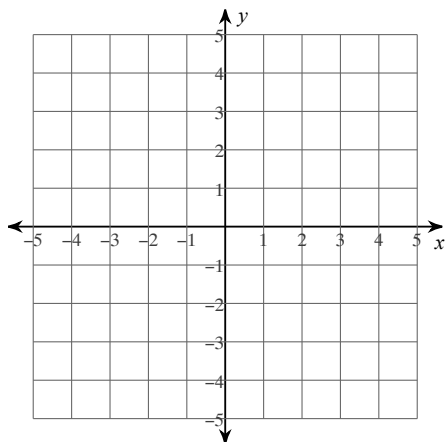
5) $y = -6x - 4$
 $y = 2x + 4$



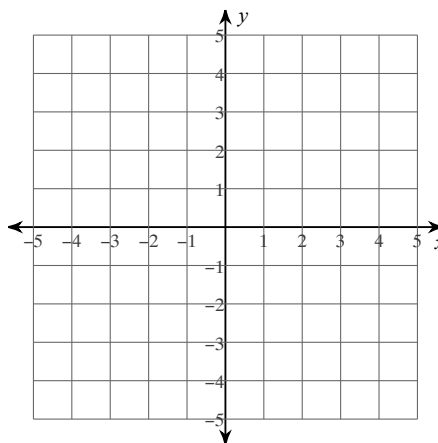
6) $y = -\frac{1}{4}x + 2$
 $y = \frac{5}{4}x - 4$



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

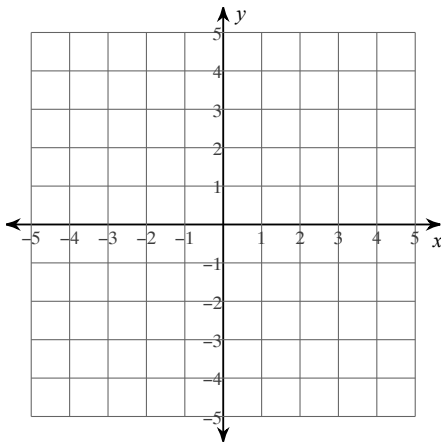


8) $y = -x - 3$
 $y = -6x + 2$



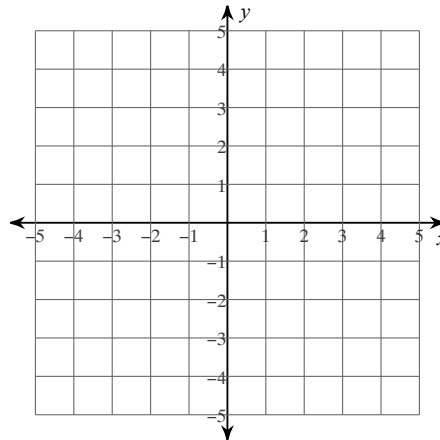
$$9) y = -\frac{1}{3}x + 3$$

$$y = -2x - 2$$



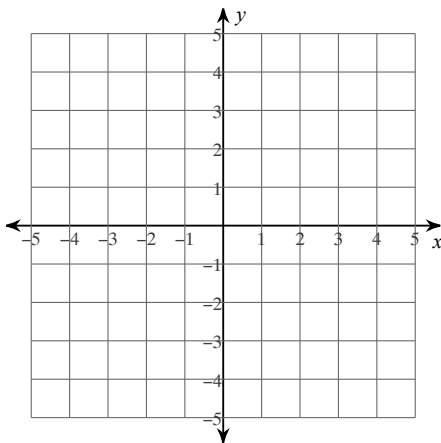
$$10) y = \frac{5}{2}x + 4$$

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



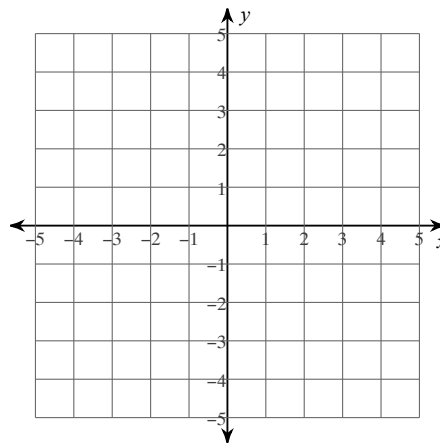
$$11) y = -\frac{1}{4}x - 2$$

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



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

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



Solve each system by substitution.

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

$$3x - 4y = 3$$

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

$$y = -5x + 22$$

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

$$-6x - y = 6$$

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

$$y = 2x + 3$$

$$\begin{aligned} 17) \quad y &= x + 1 \\ y &= 5x + 5 \end{aligned}$$

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

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

$$\begin{aligned} 20) \quad y &= -4x + 3 \\ y &= 7x - 19 \end{aligned}$$

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

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

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

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

- 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.
- 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.
- 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.
- 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?
- 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?
- 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.