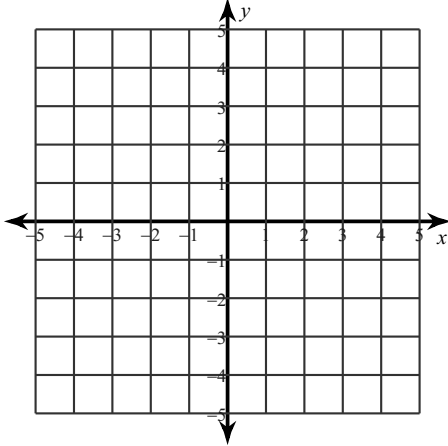


June 18, 2015

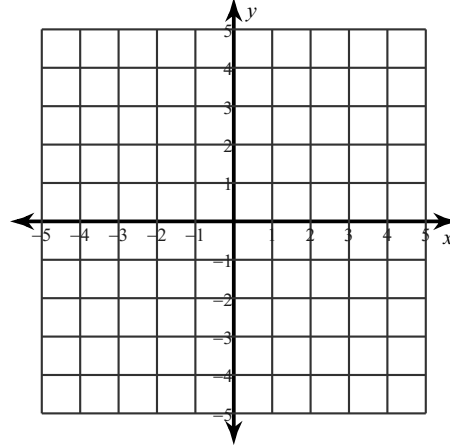
Date _____ Period _____

Solve each system by graphing.

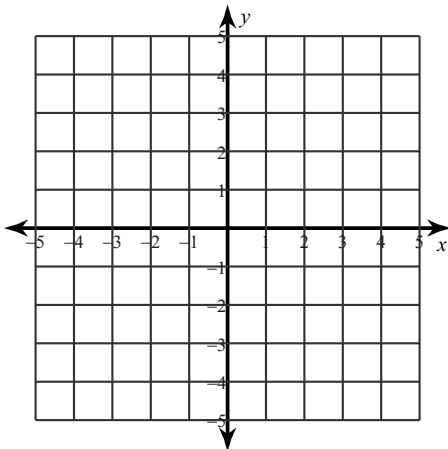
$$1) \begin{aligned} y &= x - 2 \\ y &= -x + 4 \end{aligned}$$



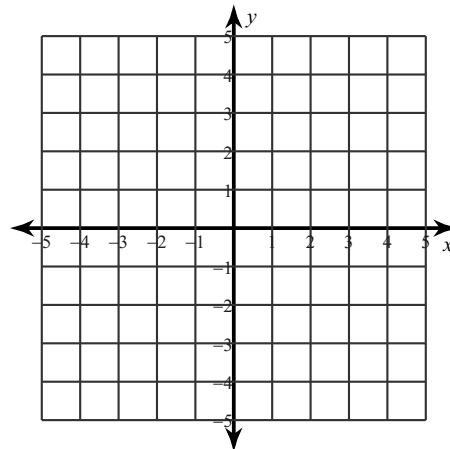
$$2) \begin{aligned} y &= -2x + 1 \\ y &= x + 4 \end{aligned}$$



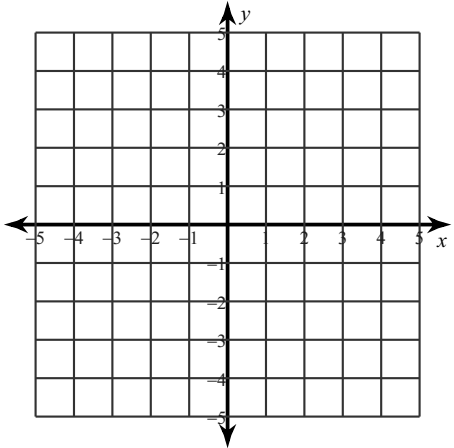
$$3) \begin{aligned} y &= \frac{5}{3}x + 3 \\ y &= -\frac{2}{3}x - 4 \end{aligned}$$



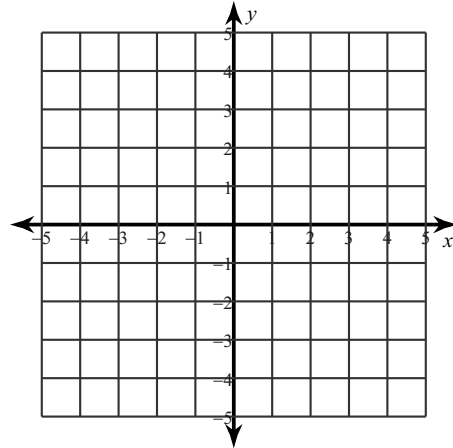
$$4) \begin{aligned} y &= \frac{4}{3}x - 1 \\ y &= \frac{1}{3}x + 2 \end{aligned}$$



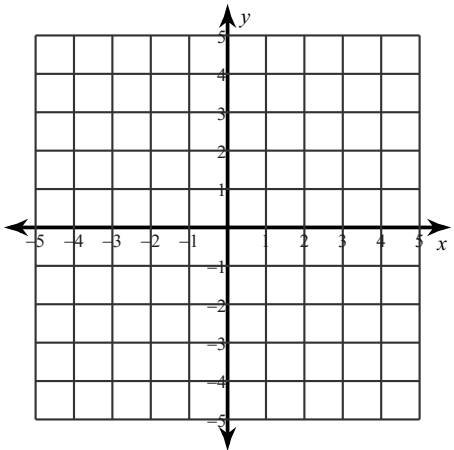
5) $3x - 2y = 6$
 $x + 4y = 16$



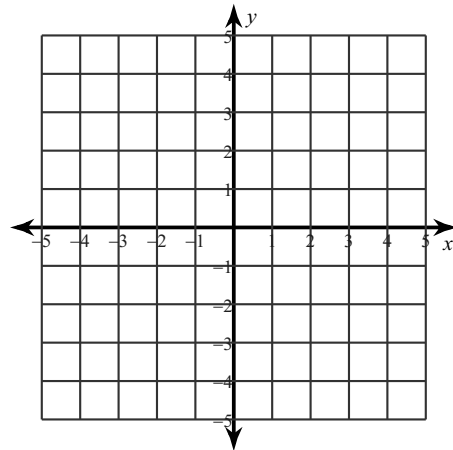
6) $3x + 2y = 6$
 $x - 4y = 16$



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



8) $2x + y = 1$
 $2x - y = 3$



Solve each system by substitution.

9) $y = -5x + 13$
 $y = x - 11$

10) $y = -8x - 21$
 $y = -4x - 13$

11) $y = 4x + 24$
 $-x - y = 1$

12) $y = 7x - 16$
 $6x - 2y = 16$

13) $x + 3y = 3$
 $7x + 5y = -11$

14) $-3x + y = 17$
 $3x - y = -17$

Solve each system by elimination.

15) $8x - 6y = 4$
 $-8x + y = 26$

16) $5x + 10y = 5$
 $-5x + 7y = 12$

17) $-6x - 3y = 3$
 $9x - 3y = -12$

18) $-7x - 2y = 28$
 $-7x + y = 7$

19) $9x + 2y = -15$
 $8x - 6y = 10$

20) $5x - 10y = 10$
 $10x - 20y = 20$

$$\begin{aligned} 21) \quad & -5x - 5y = -5 \\ & 7x + 6y = 2 \end{aligned}$$

$$\begin{aligned} 22) \quad & -8x + 7y = -6 \\ & -6x + 5y = -4 \end{aligned}$$

- 23) Bill and Natalie are selling fruit for a school fundraiser. Customers can buy small boxes of grapefruit and large boxes of grapefruit. Bill sold 7 small boxes of grapefruit and 1 large box of grapefruit for a total of \$81. Natalie sold 13 small boxes of grapefruit and 1 large box of grapefruit for a total of \$141. Find the cost each of one small box of grapefruit and one large box of grapefruit.
- 24) Adam and Eugene are selling pies for a school fundraiser. Customers can buy cherry pies and blackberry pies. Adam sold 14 cherry pies and 9 blackberry pies for a total of \$261. Eugene sold 4 cherry pies and 9 blackberry pies for a total of \$171. What is the cost each of one cherry pie and one blackberry pie?
- 25) The water park 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 12 vans and 14 buses with 500 students. High School B rented and filled 8 vans and 2 buses with 128 students. Each van and each bus carried the same number of students. Find the number of students in each van and in each bus.
- 26) The school that Wilbur goes to is selling tickets to the annual talent show. On the first day of ticket sales the school sold 3 adult tickets and 14 child tickets for a total of \$219. The school took in \$138 on the second day by selling 11 adult tickets and 7 child tickets. What is the price each of one adult ticket and one child ticket?

Answers to June 18, 2015 (ID: 1)

- 1) $(3, 1)$ 2) $(-1, 3)$ 3) $(-3, -2)$ 4) $(3, 3)$
5) $(4, 3)$ 6) $(4, -3)$ 7) $(1, -3)$ 8) $(1, -1)$
9) $(4, -7)$ 10) $(-2, -5)$ 11) $(-5, 4)$ 12) $(2, -2)$
13) $(-3, 2)$ 14) Infinite number of solutions 15) $(-4, -6)$
16) $(-1, 1)$ 17) $(-1, 1)$ 18) $(-2, -7)$ 19) $(-1, -3)$
20) Infinite number of solutions 21) $(-4, 5)$ 22) $(-1, -2)$
23) small box of grapefruit: \$10, large box of grapefruit: \$11
24) cherry pie: \$9, blackberry pie: \$15 25) Van: 9, Bus: 28
26) adult ticket: \$3, child ticket: \$15