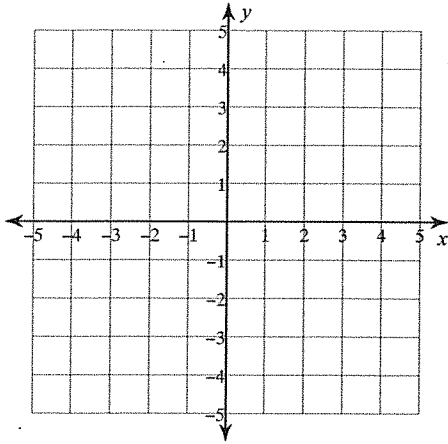


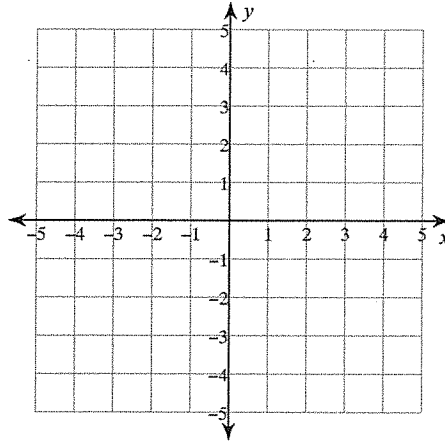
Unit 6 Review

Solve each system by graphing.

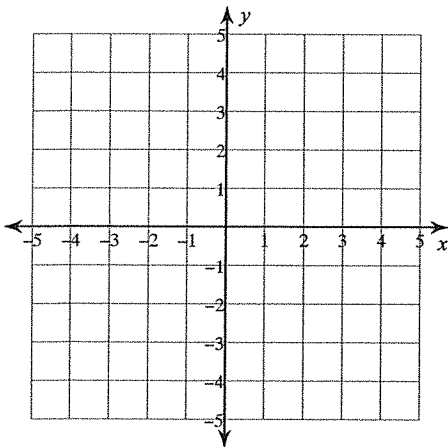
1) $y = \frac{1}{2}x + 2$
 $y = 2x - 1$



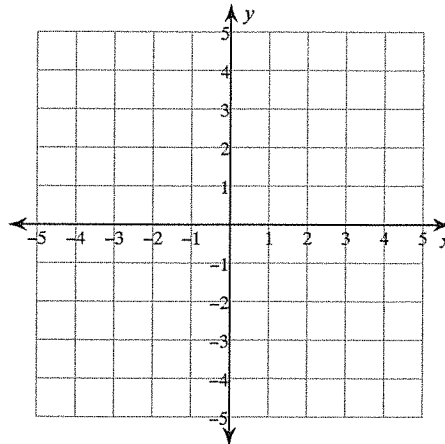
2) $y = -\frac{1}{2}x + 2$
 $y = -3x - 3$



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



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



Solve each system by substitution.

$$\begin{aligned} 8) \quad y &= 3x + 19 \\ -4x - y &= 9 \end{aligned}$$

$$\begin{aligned} 9) \quad -7x + 2y &= -6 \\ y &= -2x + 8 \end{aligned}$$

$$\begin{aligned} 10) \quad y &= 3x - 1 \\ 4x + 5y &= 14 \end{aligned}$$

$$\begin{aligned} 11) \quad 21x + 3y &= 6 \\ y &= -7x - 1 \end{aligned}$$

$$\begin{aligned} 12) \quad y &= -4 \\ 6x - 7y &= 22 \end{aligned}$$

$$\begin{aligned} 13) \quad -6x + 3y &= 30 \\ -2x + y &= 10 \end{aligned}$$

$$\begin{aligned} 14) \quad 3x + y &= -23 \\ 4x - 7y &= -14 \end{aligned}$$

Solve each system by elimination.

$$\begin{aligned} 15) \quad -4x + y &= -12 \\ 6x - 10y &= 18 \end{aligned}$$

$$\begin{aligned} 16) \quad -9x + 12y &= -6 \\ -5x + 6y &= -4 \end{aligned}$$

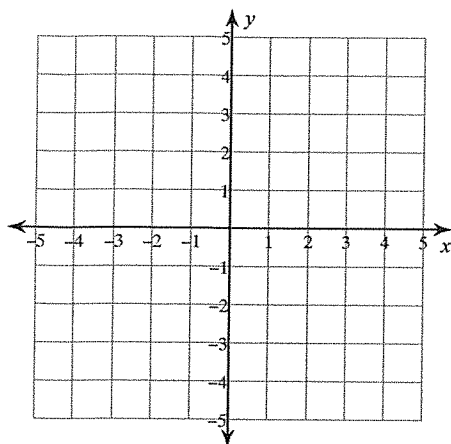
$$\begin{aligned} 17) \quad -3x + 9y &= 6 \\ -6x + 18y &= 18 \end{aligned}$$

$$\begin{aligned} 18) \quad 18x + 9y &= -27 \\ -9x + 4y &= 22 \end{aligned}$$

- 25) Lisa and Jacob are selling wrapping paper for a school fundraiser. Customers can buy rolls of plain wrapping paper and rolls of shiny wrapping paper. Lisa sold 5 rolls of plain wrapping paper and 10 rolls of shiny wrapping paper for a total of \$175. Jacob sold 4 rolls of plain wrapping paper and 5 rolls of shiny wrapping paper for a total of \$98. Find the cost each of one roll of plain wrapping paper and one roll of shiny wrapping paper.
- 26) The local amusement 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 10 vans and 4 buses with 346 students. High School B rented and filled 3 vans and 8 buses with 471 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.
- 27) Amanda and Krystal are selling fruit for a school fundraiser. Customers can buy small boxes of grapefruit and large boxes of grapefruit. Amanda sold 12 small boxes of grapefruit and 10 large boxes of grapefruit for a total of \$246. Krystal sold 4 small boxes of grapefruit and 5 large boxes of grapefruit for a total of \$107. What is the cost each of one small box of grapefruit and one large box of grapefruit?
- 28) Heather and Cody are selling flower bulbs for a school fundraiser. Customers can buy bags of windflower bulbs and packages of crocus bulbs. Heather sold 10 bags of windflower bulbs and 10 packages of crocus bulbs for a total of \$370. Cody sold 5 bags of windflower bulbs and 3 packages of crocus bulbs for a total of \$145. What is the cost each of one bag of windflower bulbs and one package of crocus bulbs?

Sketch the solution to each system of inequalities.

29) $y \geq -3x + 2$
 $y > 2x - 3$



30) $y < \frac{1}{2}x - 1$
 $y > 2x + 2$

