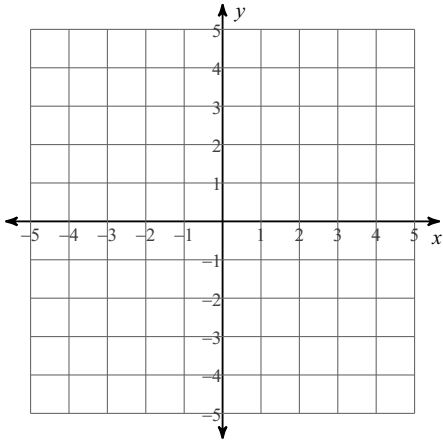


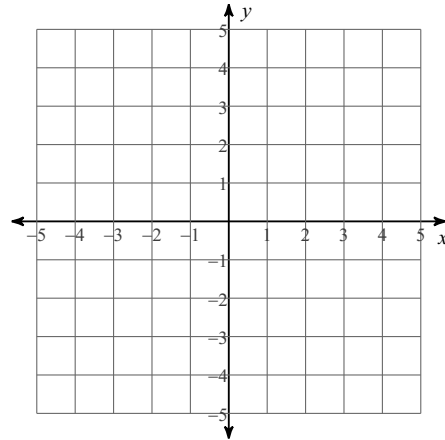
Systems Review (Sub 10/7)

Solve each system by graphing.

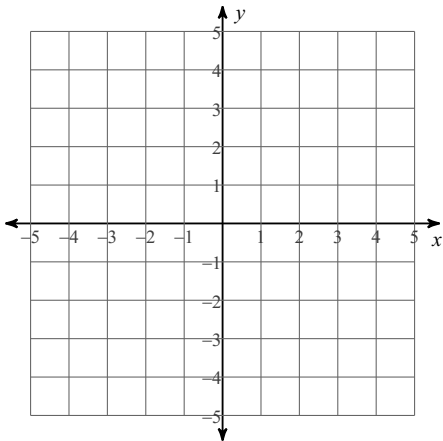
$$\begin{aligned} 1) \quad & y = -2x - 3 \\ & y = x + 3 \end{aligned}$$



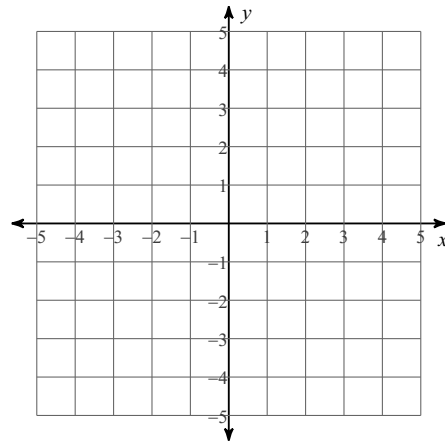
$$\begin{aligned} 2) \quad & y = -x - 3 \\ & y = 6x + 4 \end{aligned}$$



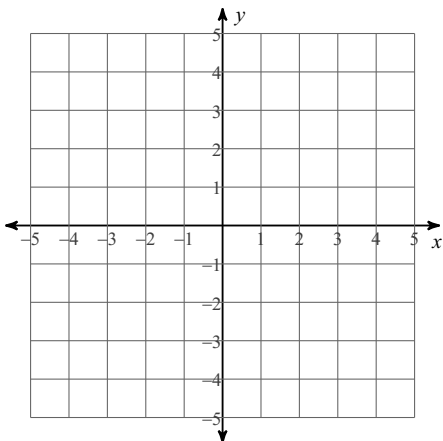
$$\begin{aligned} 3) \quad & y = -3x - 4 \\ & y = 5x + 4 \end{aligned}$$



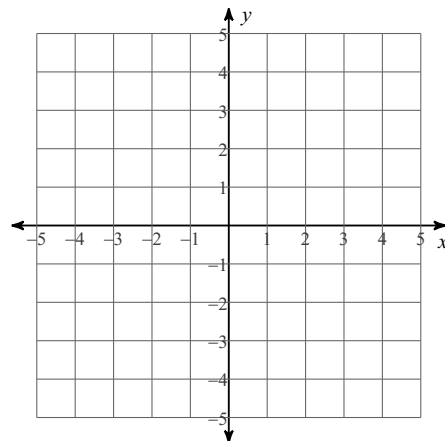
$$\begin{aligned} 4) \quad & x + 2y = 6 \\ & 3x - 2y = 2 \end{aligned}$$



$$\begin{aligned} 5) \quad & x + 3y = -6 \\ & 4x + 3y = 3 \end{aligned}$$



$$\begin{aligned} 6) \quad & 3x - y = 4 \\ & 2x + y = 1 \end{aligned}$$



Solve each system by substitution.

$$\begin{aligned} 7) \quad & -3x - y = -8 \\ & y = 8x - 3 \end{aligned}$$

$$\begin{aligned} 8) \quad & -2x + 5y = 2 \\ & y = 3x - 10 \end{aligned}$$

$$\begin{aligned} 9) \quad & y = 4 \\ & -8x - 6y = -24 \end{aligned}$$

$$\begin{aligned} 10) \quad & y = -8x + 12 \\ & 2x + 5y = -16 \end{aligned}$$

$$\begin{aligned} 11) \quad & x + 2y = -3 \\ & -5x - 3y = -13 \end{aligned}$$

$$\begin{aligned} 12) \quad & 7x - 3y = -17 \\ & x + 7y = 5 \end{aligned}$$

$$\begin{aligned} 13) \quad & -6x - 4y = -14 \\ & x + y = 2 \end{aligned}$$

$$\begin{aligned} 14) \quad & x + 2y = 5 \\ & 4x - 3y = -13 \end{aligned}$$

Solve each system by elimination.

$$\begin{aligned} 15) \quad & -8x - y = -24 \\ & 7x + y = 21 \end{aligned}$$

$$\begin{aligned} 16) \quad & x + 9y = -15 \\ & -x - 9y = 17 \end{aligned}$$

$$\begin{aligned} 17) \quad & 4x - 2y = 14 \\ & 10x - 2y = 20 \end{aligned}$$

$$\begin{aligned} 18) \quad & 5x + 2y = -13 \\ & 3x + 2y = -7 \end{aligned}$$

$$\begin{aligned} 19) \quad & -9x - 6y = 15 \\ & -18x + 3y = 15 \end{aligned}$$

$$\begin{aligned} 20) \quad & -5x - 6y = 9 \\ & -10x - 12y = 18 \end{aligned}$$

$$\begin{aligned} 21) \quad & -2x + 10y = -6 \\ & -7x + 7y = 7 \end{aligned}$$

$$\begin{aligned} 22) \quad & -10x - 9y = -2 \\ & -3x - 6y = 6 \end{aligned}$$

$$\begin{aligned} 23) \quad 20x - 16y &= -29 \\ 15x - 12y &= -18 \end{aligned}$$

$$\begin{aligned} 24) \quad -3x + 7y &= -29 \\ -5x - 9y &= -7 \end{aligned}$$

- 25) The school that Beth goes to is selling tickets to a play. On the first day of ticket sales the school sold 5 senior citizen tickets and 4 child tickets for a total of \$47. The school took in \$79 on the second day by selling 5 senior citizen tickets and 8 child tickets. What is the price each of one senior citizen ticket and one child ticket?
- 26) Huong's school is selling tickets to a spring musical. On the first day of ticket sales the school sold 12 adult tickets and 11 child tickets for a total of \$220. The school took in \$140 on the second day by selling 12 adult tickets and 1 child ticket. Find the price of an adult ticket and the price of a child ticket.
- 27) Kali and Stephanie each improved their yards by planting grass sod and shrubs. They bought their supplies from the same store. Kali spent \$62 on 6 ft² of grass sod and 2 shrubs. Stephanie spent \$151 on 11 ft² of grass sod and 13 shrubs. What is the cost of one ft² of grass sod and the cost of one shrub?
- 28) 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 4 vans and 2 buses with 102 students. High School B rented and filled 4 vans and 13 buses with 399 students. Each van and each bus carried the same number of students. Find the number of students in each van and in each bus.