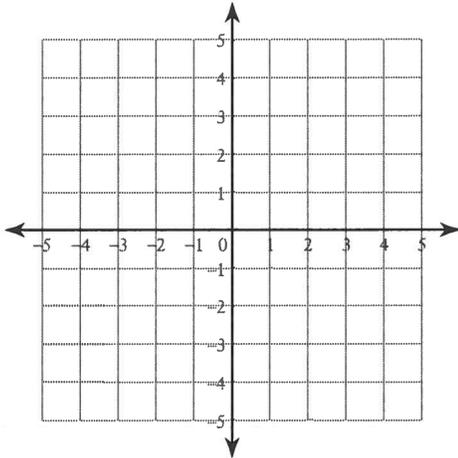


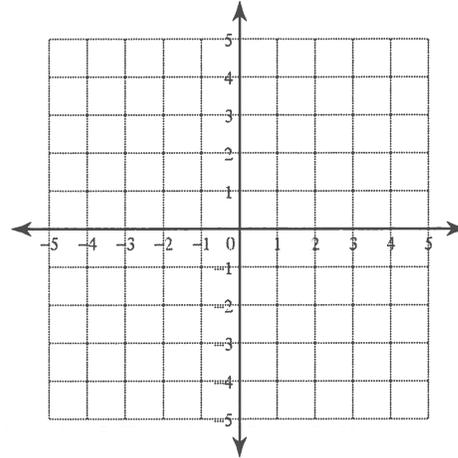
Systems of Two Equations

Solve each system by graphing.

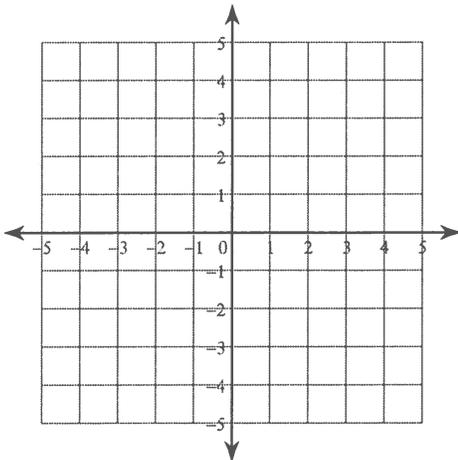
$$1) \begin{aligned} y &= -3x + 4 \\ y &= 3x - 2 \end{aligned}$$



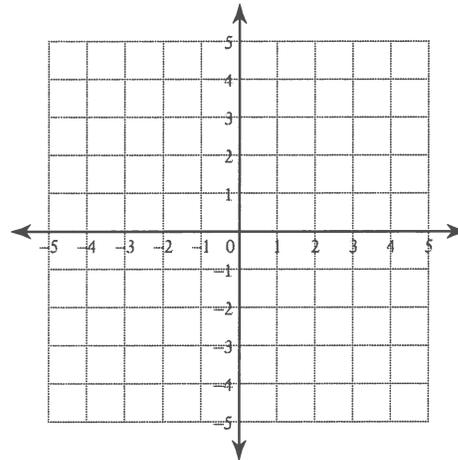
$$2) \begin{aligned} y &= x + 2 \\ x &= -3 \end{aligned}$$



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



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



Solve each system by substitution.

$$5) \begin{aligned} y &= 4x - 9 \\ y &= x - 3 \end{aligned}$$

$$6) \begin{aligned} 4x + 2y &= 10 \\ x - y &= 13 \end{aligned}$$

$$7) \begin{aligned} y &= -5 \\ 5x + 4y &= -20 \end{aligned}$$

$$8) \begin{aligned} x + 7y &= 0 \\ 2x - 8y &= 22 \end{aligned}$$

$$\begin{aligned} 9) \quad & 6x + 8y = -22 \\ & y = -5 \end{aligned}$$

$$\begin{aligned} 11) \quad & 7x + 2y = -19 \\ & -x + 2y = 21 \end{aligned}$$

$$\begin{aligned} 13) \quad & -7x + 4y = 24 \\ & 4x - 4y = 0 \end{aligned}$$

Solve each system by elimination.

$$\begin{aligned} 15) \quad & 8x - 6y = -20 \\ & -16x + 7y = 30 \end{aligned}$$

$$\begin{aligned} 17) \quad & -8x - 10y = 24 \\ & 6x + 5y = 2 \end{aligned}$$

$$\begin{aligned} 19) \quad & -4y - 11x = 36 \\ & 20 = -10x - 10y \end{aligned}$$

$$\begin{aligned} 21) \quad & 0 = -2y + 10 - 6x \\ & 14 - 22y = 18x \end{aligned}$$

$$\begin{aligned} 23) \quad & -16 + 20x - 8y = 0 \\ & 36 = -18y - 22x \end{aligned}$$

$$\begin{aligned} 10) \quad & -7x + 2y = 18 \\ & 6x + 6y = 0 \end{aligned}$$

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

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

$$\begin{aligned} 16) \quad & 6x - 12y = 24 \\ & -x - 6y = 4 \end{aligned}$$

$$\begin{aligned} 18) \quad & -24 - 8x = 12y \\ & 1 + \frac{5}{9}y = -\frac{7}{18}x \end{aligned}$$

$$\begin{aligned} 20) \quad & -9 + 5y = -4x \\ & -11x = -20 + 9y \end{aligned}$$

$$\begin{aligned} 22) \quad & -16y = 22 + 6x \\ & -11y - 4x = 15 \end{aligned}$$

$$\begin{aligned} 24) \quad & -\frac{5}{7} - \frac{11}{7}x = -y \\ & 2y = 7 + 5x \end{aligned}$$

Critical thinking questions:

25) Write a system of equations with the solution $(4, -3)$.