

Review Sheet: Systems of Equations

Solve each system by elimination.

$$\begin{aligned} 1) \quad & -x + 8y = -2 \\ & x + y = -7 \end{aligned}$$

$$\begin{aligned} 2) \quad & -5x + 3y = 26 \\ & 2x - 3y = -14 \end{aligned}$$

$$\begin{aligned} 3) \quad & -7x + 4y = 3 \\ & 4x - 4y = -12 \end{aligned}$$

$$\begin{aligned} 4) \quad & -5x + 6y = -1 \\ & -8x + 6y = -16 \end{aligned}$$

$$\begin{aligned} 5) \quad & -3x - 3y = -24 \\ & 7x - 3y = -4 \end{aligned}$$

$$\begin{aligned} 6) \quad & -9x - 3y = -12 \\ & -8x - 3y = -10 \end{aligned}$$

$$\begin{aligned} 7) \quad & -5x - 3y = 5 \\ & x + 10y = -1 \end{aligned}$$

$$\begin{aligned} 8) \quad & 8x + 7y = 3 \\ & 16x + 10y = 18 \end{aligned}$$

$$\begin{aligned} 9) \quad & 3x + 14y = 25 \\ & 5x - 7y = -19 \end{aligned}$$

$$\begin{aligned} 10) \quad & y = 4 - 10x \\ & 7x - 19 = 2y \end{aligned}$$

$$\begin{aligned} 11) \quad & -\frac{5}{7} - \frac{4}{7}x = -y \\ & y = -25 - 2x \end{aligned}$$

$$\begin{aligned} 12) \quad & -7y = 18x - 3 \\ & -9x - 21 = -4y \end{aligned}$$

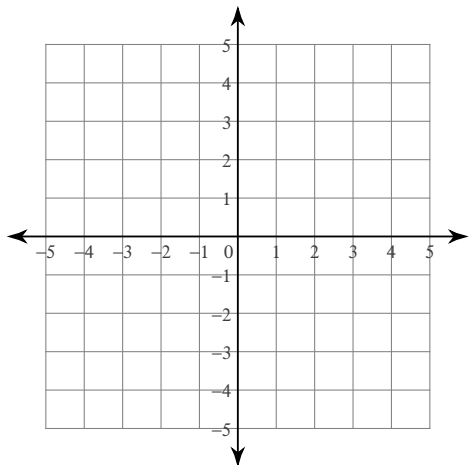
$$\begin{aligned} 13) \quad & 3x + 3y = -9 \\ & 2x - 8y = 24 \end{aligned}$$

$$\begin{aligned} 14) \quad & 70x + 35y = 0 \\ & 20x + 10y = 0 \end{aligned}$$

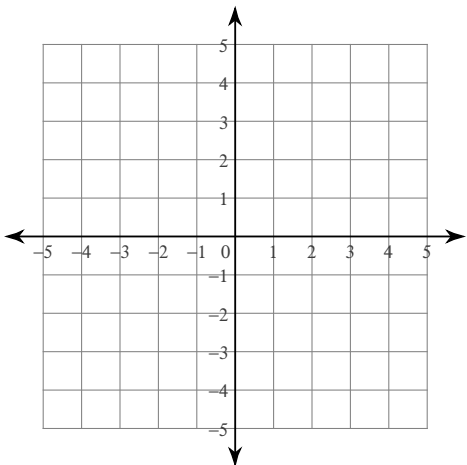
$$\begin{aligned} 15) \quad & 32x + 12y = -12 \\ & 80x + 30y = -30 \end{aligned}$$

Solve each system by graphing.

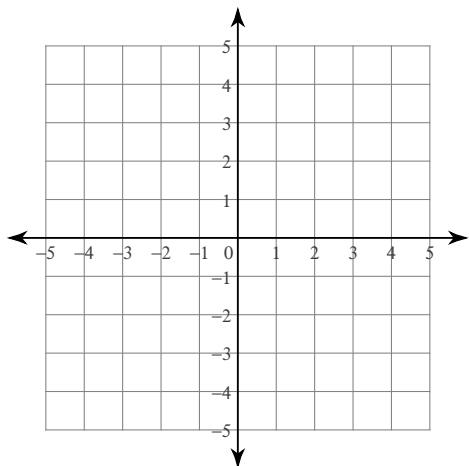
16) $x - y = -3$
 $x + y = 1$



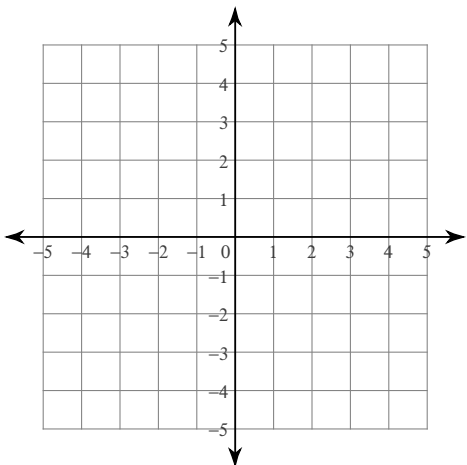
17) $5x + y = -1$
 $x + y = 3$



18) $x + y = -3$
 $7x + y = 3$

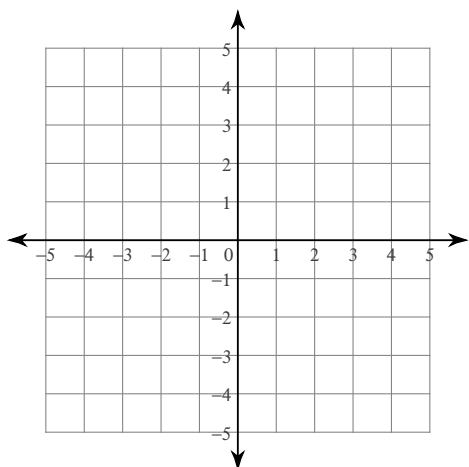


19) $y = \frac{1}{2}x - 2$
 $y = \frac{5}{2}x + 2$



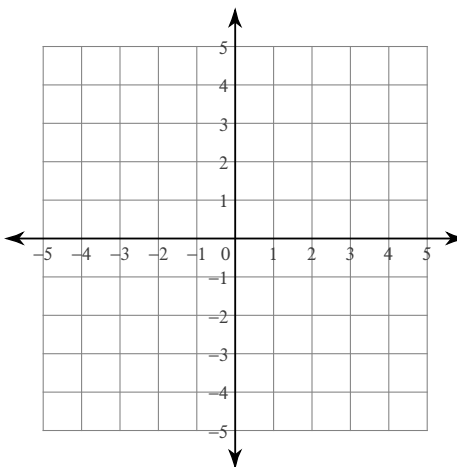
$$20) \quad y = -\frac{1}{2}x + 2$$

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



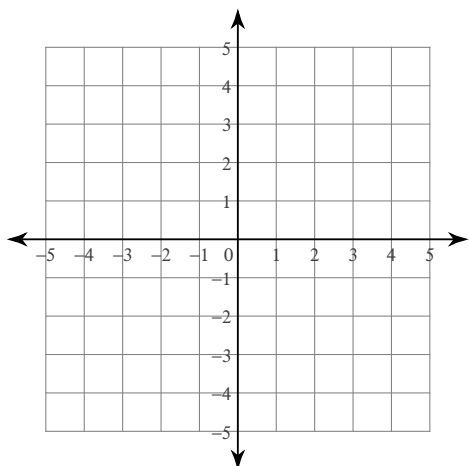
$$21) \quad y = -3x - 3$$

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



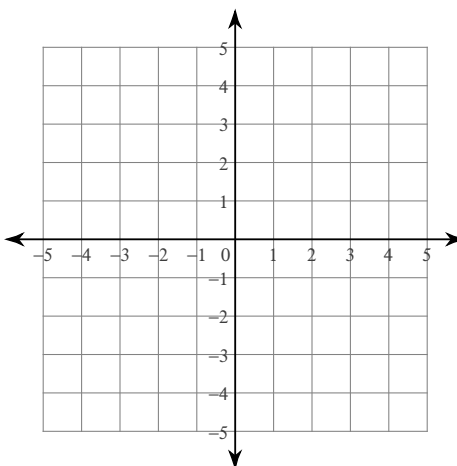
$$22) \quad 3y = -5x - 3$$

$$9y + 3x = 27$$



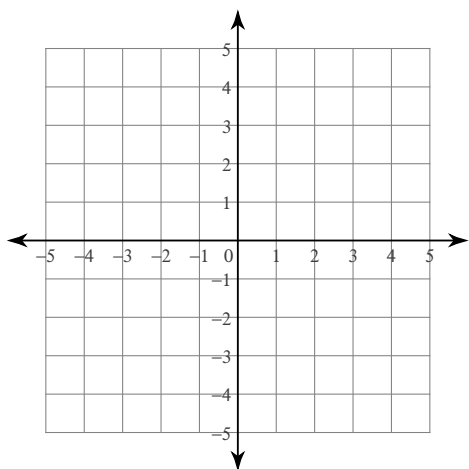
$$23) \quad -3x = 4 - y$$

$$-2y + x = 2$$



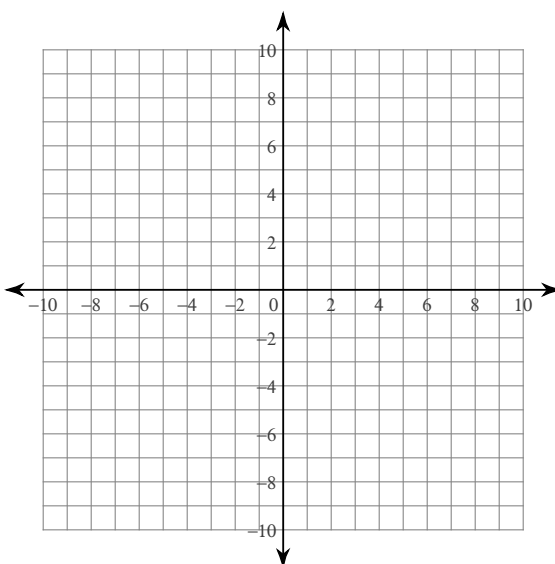
$$24) \quad x - \frac{1}{2}y = \frac{3}{2}$$

$$x = 3 - y$$



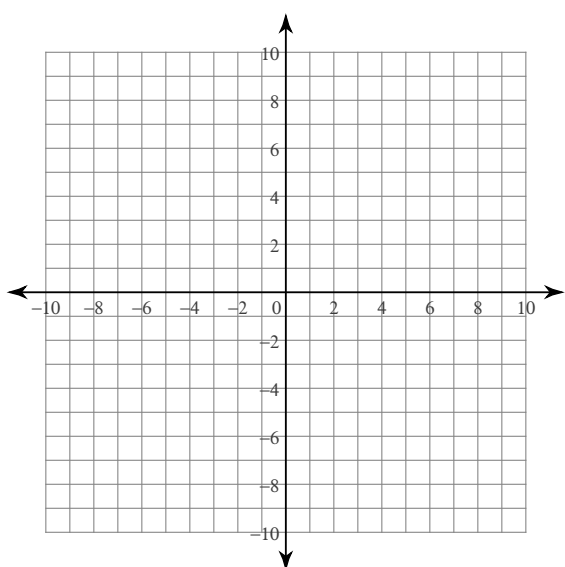
$$25) \quad -1 + y = 0$$

$$15 + 5y = -4x$$



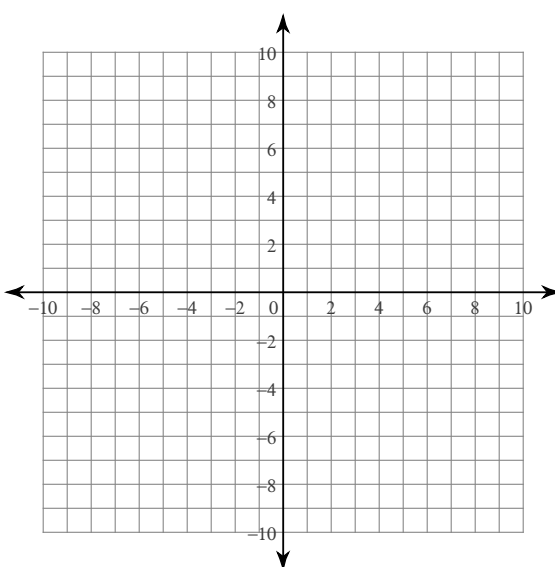
$$26) \quad 0 = 3x - 27$$

$$0 = -13x + 72 + 9y$$

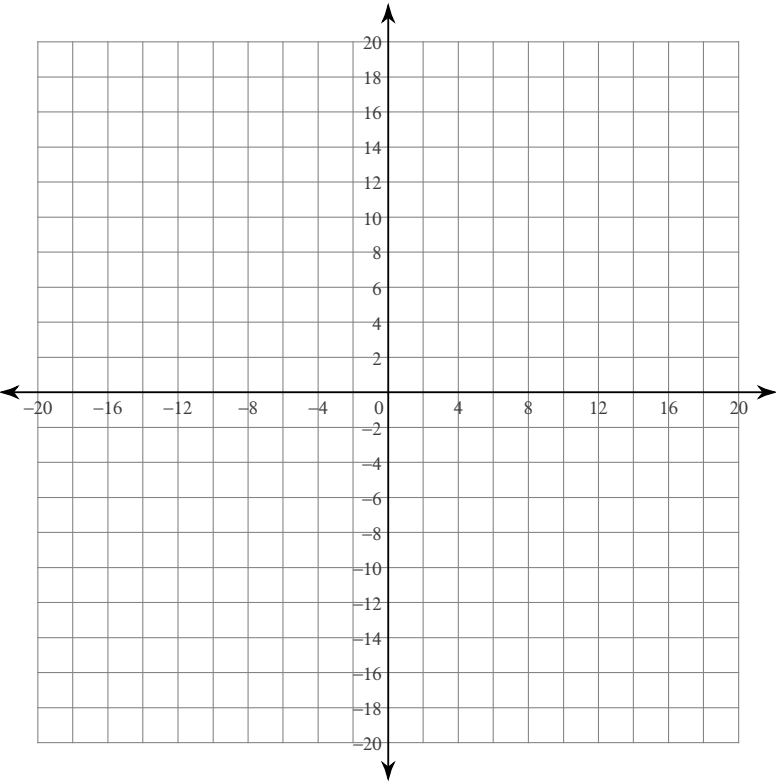


$$27) \quad 4x - y = 4$$

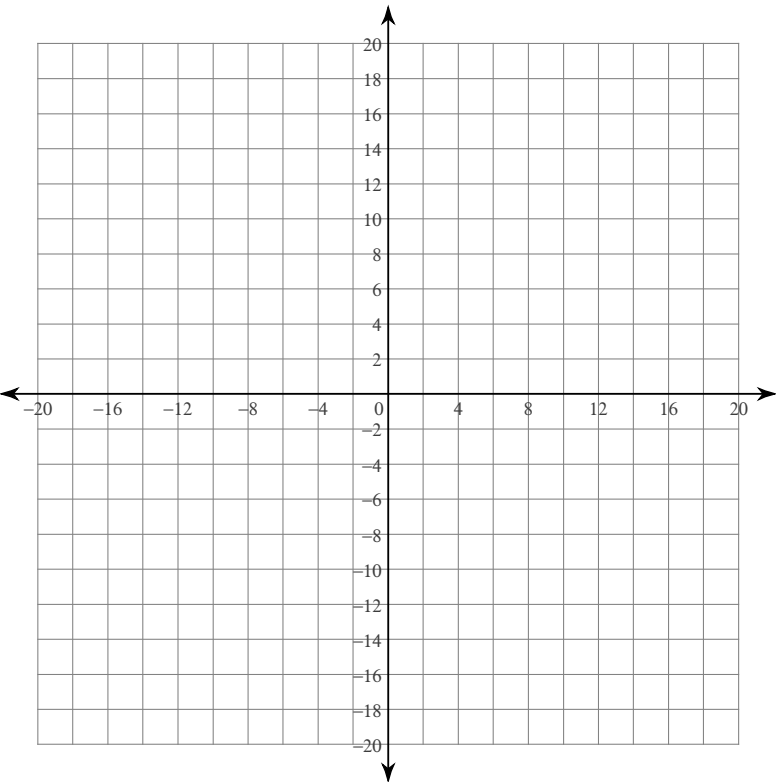
$$-18 = -3y + 2x$$



28) $-26x = -120 + 20y$
 $-x = 5y + 25$

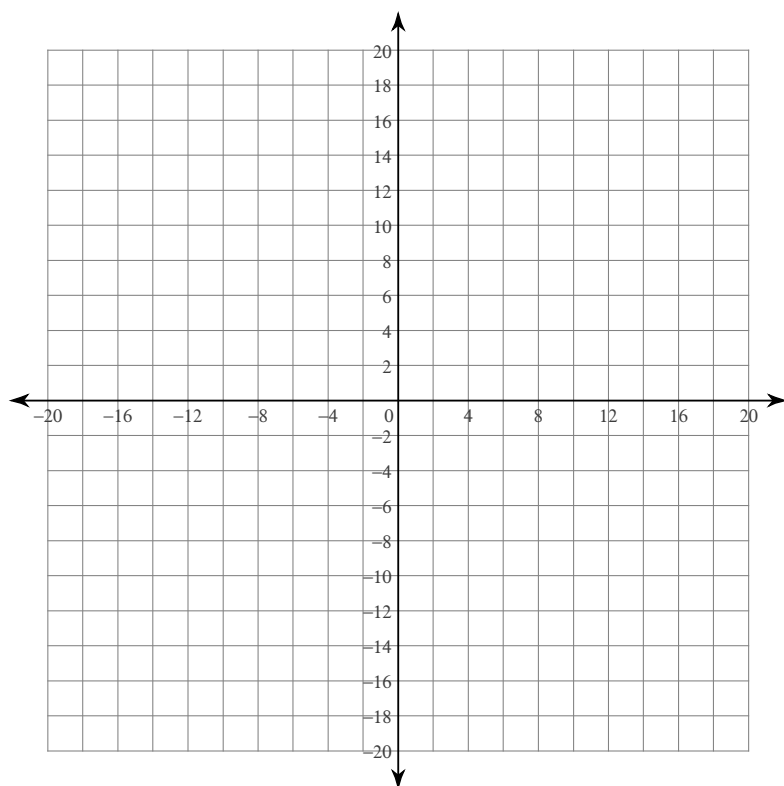


29) $-14x + 25 = -5y$
 $\frac{1}{6}y - \frac{1}{10}x = 1$



$$30) -\frac{1}{3}y = 3 + \frac{1}{7}x$$

$$-1 = -\frac{1}{8}y + \frac{11}{112}x$$



Solve each system by substitution.

$$31) \begin{aligned} y &= x + 1 \\ y &= -5x + 13 \end{aligned}$$

$$32) \begin{aligned} y &= 5x - 6 \\ y &= x + 2 \end{aligned}$$

$$33) \begin{aligned} y &= -8x + 22 \\ y &= -3x + 7 \end{aligned}$$

$$34) \begin{aligned} -7x - 8y &= -22 \\ y &= -8x + 17 \end{aligned}$$

$$35) \begin{aligned} y &= 5x - 10 \\ -6x - 3y &= -12 \end{aligned}$$

$$36) \begin{aligned} y &= 5x - 7 \\ -7x + 5y &= 1 \end{aligned}$$

$$37) \begin{aligned} -8x - 8y &= 8 \\ -x + y &= -9 \end{aligned}$$

$$38) \begin{aligned} x + 4y &= -10 \\ 6x + 3y &= 3 \end{aligned}$$

$$39) \begin{aligned} -x + y &= 3 \\ 7x + 6y &= 5 \end{aligned}$$

$$40) \begin{aligned} -5x - y &= 22 \\ -6x + 4y &= -10 \end{aligned}$$

$$41) \begin{aligned} -4x + 4y &= -12 \\ -x + 2y &= -9 \end{aligned}$$

$$42) \begin{aligned} -2x - y &= -9 \\ -x - 3y &= 13 \end{aligned}$$

Answers to Review Sheet: Systems of Equations (ID: 1)

- | | | | |
|----------------|----------------------------------|----------------------------------|----------------|
| 1) $(-6, -1)$ | 2) $(-4, 2)$ | 3) $(3, 6)$ | 4) $(5, 4)$ |
| 5) $(2, 6)$ | 6) $(2, -2)$ | 7) $(-1, 0)$ | 8) $(3, -3)$ |
| 9) $(-1, 2)$ | 10) $(1, -6)$ | 11) $(-10, -5)$ | 12) $(-1, 3)$ |
| 13) $(0, -3)$ | 14) Infinite number of solutions | 15) Infinite number of solutions | |
| 16) $(-1, 2)$ | 17) $(-1, 4)$ | 18) $(1, -4)$ | 19) $(-2, -3)$ |
| 20) $(-2, 3)$ | 21) $(-2, 3)$ | 22) $(-3, 4)$ | 23) $(-2, -2)$ |
| 24) $(2, 1)$ | 25) $(-5, 1)$ | 26) $(9, 5)$ | 27) $(3, 8)$ |
| 28) $(10, -7)$ | 29) $(5, 9)$ | 30) $(-14, -3)$ | 31) $(2, 3)$ |
| 32) $(2, 4)$ | 33) $(3, -2)$ | 34) $(2, 1)$ | 35) $(2, 0)$ |
| 36) $(2, 3)$ | 37) $(4, -5)$ | 38) $(2, -3)$ | 39) $(-1, 2)$ |
| 40) $(-3, -7)$ | 41) $(-3, -6)$ | 42) $(8, -7)$ | |