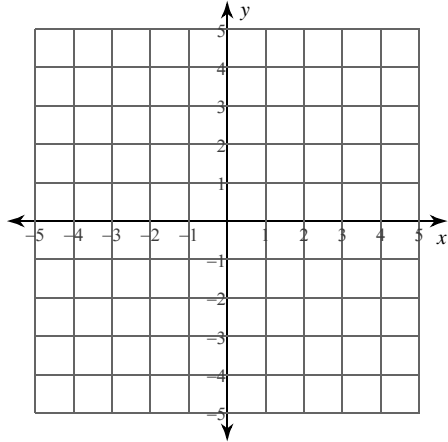


Solving Linear Systems---(POI)

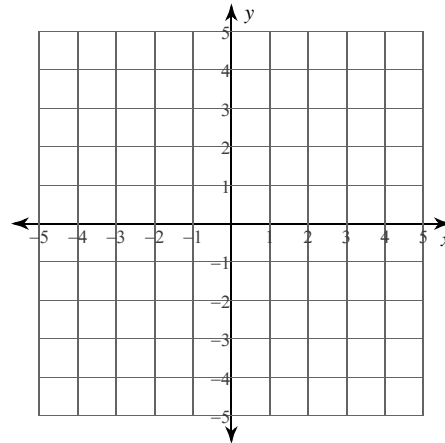
Find the Point of Intersection (POI) by graphing both lines and observing where they intersect.

1) $y = -4x + 2$
 $y = x - 3$



2) $y = \frac{1}{2}x - 4$

$y = -\frac{1}{4}x - 1$



Calculate the POI.

FIRST: Set the equations EQUAL to each other.

SECOND: Solve for 'x'.

THIRD: Substitute the 'x' you calculated into one of the ORIGINAL equations to calculate 'y'.

3) $y = -7x + 14$
 $y = 3x + 4$

4) $y = -5x$
 $y = 4x - 9$

5) $y = -8x - 6$
 $y = 5x - 6$

6) $y = 4x - 15$
 $y = -7x + 7$

Calculate the POI.

FIRST: Rewrite the equations so they are both set EQUAL to 'y'.

SECOND: Set both equations equal to each other and solve for 'x'.

THIRD: Substitute the 'x' into one of the ORIGINAL equations to calculate 'y'.

7) $y = 4x - 11$
 $3x - 4y = 18$

8) $-5x + 5y = -10$
 $y = -3x - 2$

9) $y = 7x - 1$
 $-7x - 6y = 6$

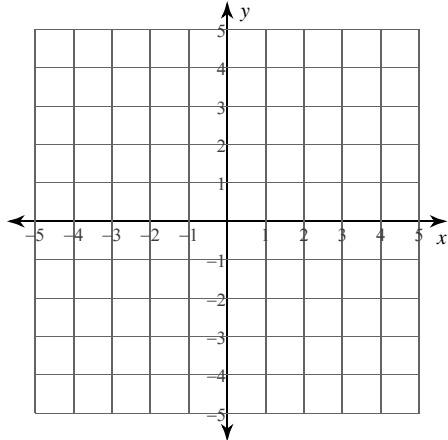
10) $y = -5x + 16$
 $-x - 5y = 16$

Solving Linear Systems---(POI)

Find the Point of Intersection (POI) by graphing both lines and observing where they intersect.

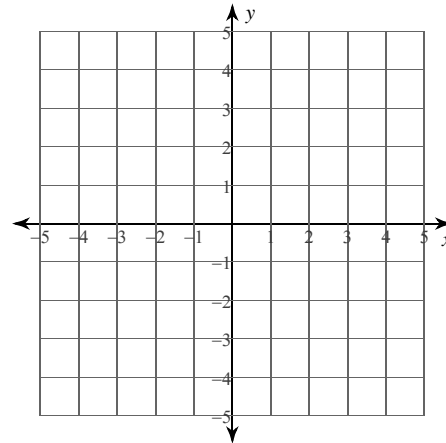
1) $y = -\frac{1}{3}x + 2$

$y = x - 2$



2) $y = -\frac{7}{3}x - 4$

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



Calculate the POI.

FIRST: Set the equations EQUAL to each other.

SECOND: Solve for 'x'.

THIRD: Substitute the 'x' you calculated into one of the ORIGINAL equations to calculate 'y'.

3) $y = -5x + 18$
 $y = -7x + 24$

4) $y = 5x - 23$
 $y = -5x + 17$

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

$$\begin{aligned} 6) \quad y &= -5x - 3 \\ y &= 6x - 14 \end{aligned}$$

Calculate the POI.

FIRST: Rewrite the equations so they are both set EQUAL to 'y'.

SECOND: Set both equations equal to each other and solve for 'x'.

THIRD: Substitute the 'x' into one of the ORIGINAL equations to calculate 'y'.

$$\begin{aligned} 7) \quad y &= x + 6 \\ 3x + 3y &= 0 \end{aligned}$$

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

$$\begin{aligned} 9) \quad -7x - 2y &= -3 \\ y &= -3x + 2 \end{aligned}$$

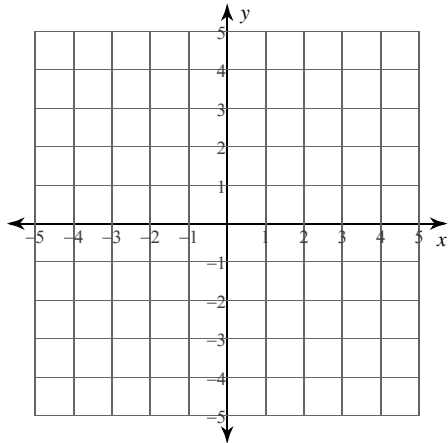
$$\begin{aligned} 10) \quad 4x - 4y &= -24 \\ y &= 6x + 11 \end{aligned}$$

Solving Linear Systems---(POI)

Find the Point of Intersection (POI) by graphing both lines and observing where they intersect.

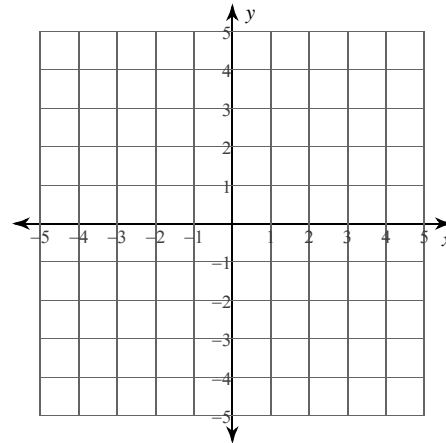
1) $y = -\frac{1}{4}x - 4$

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



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

$y = -\frac{5}{4}x - 2$



Calculate the POI.

FIRST: Set the equations EQUAL to each other.

SECOND: Solve for 'x'.

THIRD: Substitute the 'x' you calculated into one of the ORIGINAL equations to calculate 'y'.

3) $y = -8x - 2$
 $y = -6x - 2$

4) $y = 6x + 17$
 $y = 2x + 1$

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

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

Calculate the POI.

FIRST: Rewrite the equations so they are both set EQUAL to 'y'.

SECOND: Set both equations equal to each other and solve for 'x'.

THIRD: Substitute the 'x' into one of the ORIGINAL equations to calculate 'y'.

$$\begin{aligned} 7) \quad -3x - 8y &= -13 \\ y &= -5x - 3 \end{aligned}$$

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

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

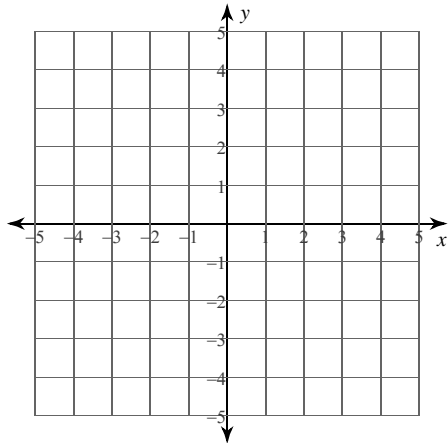
$$\begin{aligned} 10) \quad 7x - 5y &= -3 \\ y &= -6x + 8 \end{aligned}$$

Solving Linear Systems---(POI)

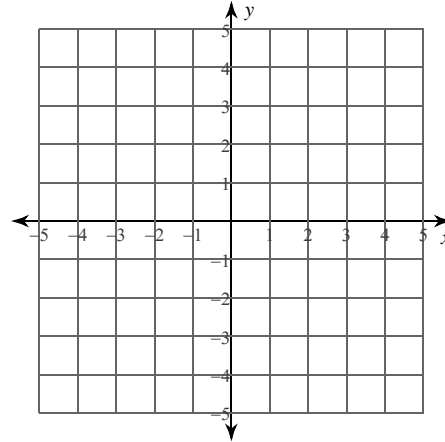
Find the Point of Intersection (POI) by graphing both lines and observing where they intersect.

1) $y = \frac{5}{3}x - 3$

$y = \frac{1}{3}x + 1$



2) $x = 1$
 $y = x + 1$



Calculate the POI.

FIRST: Set the equations EQUAL to each other.

SECOND: Solve for 'x'.

THIRD: Substitute the 'x' you calculated into one of the ORIGINAL equations to calculate 'y'.

3) $y = -3x + 18$
 $y = -2x + 12$

4) $y = -4x + 9$
 $y = 2x + 3$

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

$$\begin{aligned} 6) \quad y &= -3x + 14 \\ y &= 2x - 6 \end{aligned}$$

Calculate the POI.

FIRST: Rewrite the equations so they are both set EQUAL to 'y'.

SECOND: Set both equations equal to each other and solve for 'x'.

THIRD: Substitute the 'x' into one of the ORIGINAL equations to calculate 'y'.

$$\begin{aligned} 7) \quad y &= -2x - 8 \\ 2x - 2y &= -20 \end{aligned}$$

$$\begin{aligned} 8) \quad 7x + 7y &= 21 \\ y &= -4x + 6 \end{aligned}$$

$$\begin{aligned} 9) \quad 5x - 7y &= 20 \\ y &= -4x - 17 \end{aligned}$$

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