



Visual Guided Practice

Name: _____

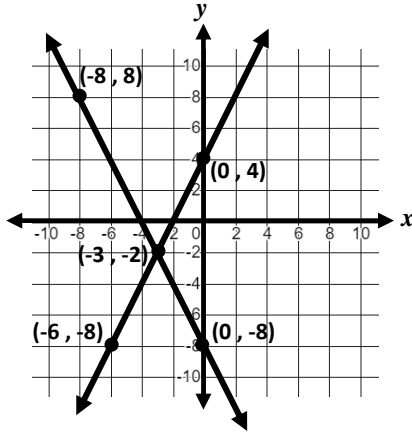
Learning Target: I will solve systems of linear equations.

Form A

1. We Do Together

Line 1: $y = 2x + 4$ and Line 2: $y = -2x - 8$

1a. Which ordered pair (x, y) is a solution to both lines?



$x =$

$y =$

Solution to the system of equations

(\quad , \quad)

1b. Notice: $2x + 4$ and $-2x - 8$ are both equal to y . They can be **substituted** to create a new equation. Solve to find x , then use the value of x to find y .

$2x + 4 = -2x - 8$

Since $x =$, then

$2x + 4 = -2x +$

$y = 2 \cdot$ $+ 4$

$4x + 4 =$ -8

$y =$ $+ 4$

$4x = -12$

$y =$

$x =$

Solution = (\quad , \quad)

1c. Notice: The coefficients of x are opposite values. The equations can be added to **eliminate** the x variable and create a new equation. Solve to find y , then use the value of y to find x .

$$\begin{array}{r} y = 2x + 4 \\ + (y = -2x + -8) \\ \hline \end{array}$$

Since $y =$, then

$$\begin{array}{r} \square = 0 + \square \\ \square = \square \end{array}$$

$$\begin{array}{r} \square = 2x + 4 \\ \square = \square \end{array}$$

$y =$

$$\begin{array}{r} -6 = 2x \\ \square = \square \end{array}$$

Note: The value of y can be substituted into either equation.

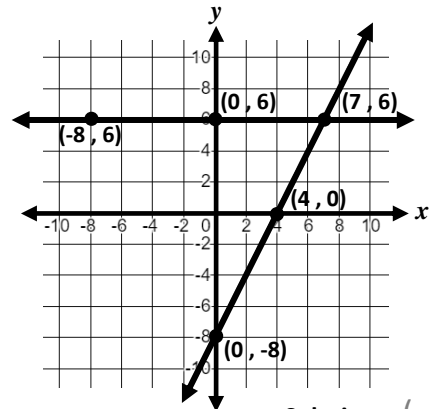
$$\begin{array}{r} \square = x \\ \text{Solution} = (\quad , \quad) \end{array}$$

2. Reflect: What questions do you have?

3-5. You Do Together

3. Use the graph to find the solution to the two lines.

Line 1: $y = 2x - 8$ and Line 2: $y = 6$



Solution = (\quad , \quad)

4. Use substitution to find the solution to the two lines.

$y = -5x - 18$ and $y = -2x - 6$

Solution = (\quad , \quad)

5. Use elimination to find the solution to the two lines.

$$\begin{array}{r} -15x - 3y = 6 \\ 4x + 3y = 5 \end{array}$$

Solution = (\quad , \quad)

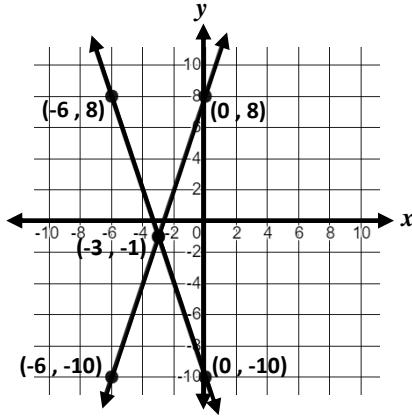
Learning Target: I will solve systems of linear equations.

Form B

1. We Do Together

Line 1: $y = 3x + 8$ and Line 2: $y = -3x - 10$

1a. Which ordered pair (x, y) is a solution to both lines?



$x = \square$

$y = \square$

Solution to the system of equations

(\quad, \quad)

1b. Notice: $3x + 8$ and $-3x - 10$ are both equal to y . They can be **substituted** to create a new equation. Solve to find x , then use the value of x to find y .

$3x + 8 = -3x - 10$

Since $x = \square$, then

$3x + 8 = -3x + \square$

$y = 3 \cdot \square + 8$

$6x + 8 = -10$

$y = \square + 8$

$6x = -18$

$y = \square$

$x = \square$

Solution = (\quad, \quad)

1c. Notice: The coefficients of x are opposite values. The equations can be added to **eliminate** the x variable and create a new equation. Solve to find y , then use the value of y to find x .

$$\begin{array}{r} y = 3x + 8 \\ + (y = -3x + -10) \\ \hline \square = 0 + \square \\ \square = \square \end{array}$$

$y = \square$

Since $y = \square$, then

$$\begin{array}{r} \square = 3x + 8 \\ \square = \square \end{array}$$

$$\begin{array}{r} -9 = 3x \\ \square = \square \end{array}$$

$\square = x$

Solution = (\quad, \quad)

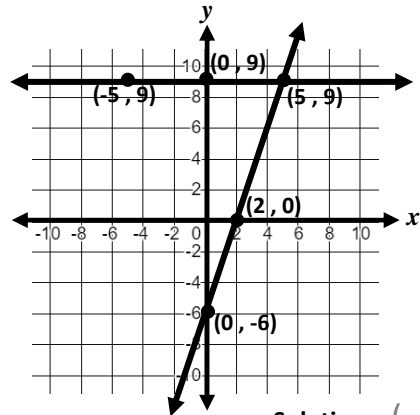
Note: The value of y can be substituted into either equation.

2. Reflect: What questions do you have?

3-5. You Do Together

3. Use the graph to find the solution to the two lines.

Line 1: $y = 3x - 6$ and Line 2: $y = 9$



Solution = (\quad, \quad)

4. Use substitution to find the solution to the two lines.

$y = 3x - 4 \quad \text{and} \quad y = 2x - 3$

Solution = (\quad, \quad)

5. Use elimination to find the solution to the two lines.

$$\begin{array}{r} 4x - 8y = -4 \\ -5x + 8y = 11 \end{array}$$

Solution = (\quad, \quad)

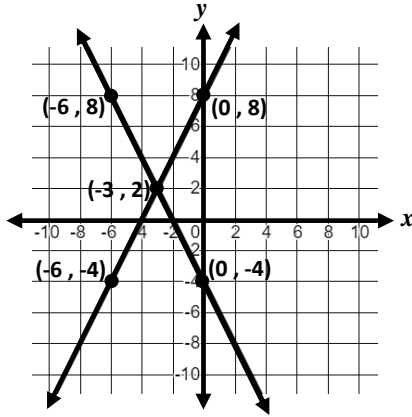
Learning Target: I will solve systems of linear equations.

Form C

1. We Do Together

Line 1: $y = 2x + 8$ and Line 2: $y = -2x - 4$

1a. Which ordered pair (x, y) is a solution to both lines?



$$x = \boxed{}$$

$$y = \boxed{}$$

Solution to the system of equations

$$(,)$$

1b. Notice: $2x + 8$ and $-2x - 4$ are both equal to y . They can be **substituted** to create a new equation. Solve to find x , then use the value of x to find y .

$$2x + 8 = -2x - 4$$

Since $x = \boxed{}$, then

$$2x + 8 = -2x + \boxed{}$$

$$y = 2 \cdot \boxed{} + 8$$

$$4x + 8 = - 4$$

$$y = \boxed{} + 8$$

$$4x = -12$$

$$y = \boxed{}$$

$$\boxed{} \quad \boxed{}$$

$$x = \boxed{}$$

$$\text{Solution} = (,)$$

1c. Notice: The coefficients of x are opposite values. The equations can be added to **eliminate** the x variable and create a new equation. Solve to find y , then use the value of y to find x .

$$\begin{array}{r} y = 2x + 8 \\ + (y = -2x + -4) \\ \hline \end{array}$$

Since $y = \boxed{}$, then

$$\boxed{} = 0 + \boxed{}$$

$$\boxed{} = 2x + 8$$

$$y = \boxed{}$$

$$\boxed{} = 2x$$

Note: The value of y can be substituted into either equation.

$$\boxed{} = x$$

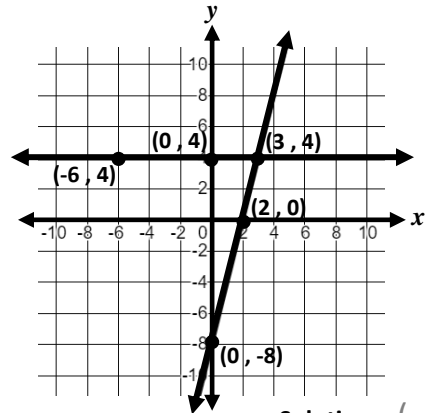
$$\text{Solution} = (,)$$

2. Reflect: What questions do you have?

3-5. You Do Together

3. Use the graph to find the solution to the two lines.

Line 1: $y = 4x - 8$ and Line 2: $y = 4$



$$\text{Solution} = (,)$$

4. Use substitution to find the solution to the two lines.

$$y = 2x + 9 \quad \text{and} \quad y = -5x - 5$$

$$\text{Solution} = (,)$$

5. Use elimination to find the solution to the two lines.

$$\begin{array}{r} 3x - 6y = 18 \\ 2x + 6y = -8 \end{array}$$

$$\text{Solution} = (,)$$