Lesson 1.8.3: Solving Systems of Linear Equations by Graphing

Using the Intercept Method

1. Graph the equations in the same coordinate plane.
2. Determine the coordinates of all the points common to the graphs.

Practice Exercises 1.8.3

Find the solutions of the following systems of linear equations graphically.

1. $\begin{cases} x+y &= 12 \\ x-y &= 8 \end{cases}$
2. $\begin{cases} 3x+6y &= 4 \\ 6x+12y &= 8 \end{cases}$
3. $\begin{cases} 8 &= x+y \\ -4 &= x-y \end{cases}$
4. $\begin{cases} x+y &= 3 \\ x+y &= -2 \end{cases}$
5. $\begin{cases} x-8y &= 2 \\ 3x-24y &= 6 \end{cases}$

Activity 1.8.3

Find the solutions of the following systems of linear equations graphically.

1. $\begin{cases} y &= \frac{2}{3}x+6 \\ y &= -\frac{3}{2}x+6 \end{cases}$
2. $\begin{cases} x+y &= 7 \\ x-y &= 1 \end{cases}$
3. $\begin{cases} 4x-y &= 8 \\ 3x+2y &= 6 \end{cases}$
4. $\begin{cases} x+4y &= 8 \\ x-2y &= 2 \end{cases}$
5. $\begin{cases} x+y=5 \\ y=5x+\frac{1}{2} \end{cases}$

Lesson 1.8.3: Solving Systems of Linear Equations by Graphing

Using the Intercept Method

1. Graph the equations in the same coordinate plane.
2. Determine the coordinates of all the points common to the graphs.

Practice Exercises 1.8.3

Find the solutions of the following systems of linear equations graphically.

1. $\begin{cases} x+y &= 12 \\ x-y &= 8 \end{cases}$
2. $\begin{cases} 3x+6y &= 4 \\ 6x+12y &= 8 \end{cases}$
3. $\begin{cases} 8 &= x+y \\ -4 &= x-y \end{cases}$
4. $\begin{cases} x+y &= 3 \\ x+y &= -2 \end{cases}$
5. $\begin{cases} x-8y &= 2 \\ 3x-24y &= 6 \end{cases}$

Activity 1.8.3

Find the solutions of the following systems of linear equations graphically.

1. $\begin{cases} y &= \frac{2}{3}x+6 \\ y &= -\frac{3}{2}x+6 \end{cases}$
2. $\begin{cases} x+y &= 7 \\ x-y &= 1 \end{cases}$
3. $\begin{cases} 4x-y &= 8 \\ 3x+2y &= 6 \end{cases}$
4. $\begin{cases} x+4y &= 8 \\ x-2y &= 2 \end{cases}$
5. $\begin{cases} x+y=5 \\ y=5x+\frac{1}{2} \end{cases}$

Lesson 1.8.3: Solving Systems of Linear Equations by Graphing

Using the Intercept Method

1. Graph the equations in the same coordinate plane.
2. Determine the coordinates of all the points common to the graphs.

Practice Exercises 1.8.3

Find the solutions of the following systems of linear equations graphically.

1. $\begin{cases} x+y &= 12 \\ x-y &= 8 \end{cases}$
2. $\begin{cases} 3x+6y &= 4 \\ 6x+12y &= 8 \end{cases}$
3. $\begin{cases} 8 &= x+y \\ -4 &= x-y \end{cases}$
4. $\begin{cases} x+y &= 3 \\ x+y &= -2 \end{cases}$
5. $\begin{cases} x-8y &= 2 \\ 3x-24y &= 6 \end{cases}$

Activity 1.8.3

Find the solutions of the following systems of linear equations graphically.

1. $\begin{cases} y &= \frac{2}{3}x+6 \\ y &= -\frac{3}{2}x+6 \end{cases}$
2. $\begin{cases} x+y &= 7 \\ x-y &= 1 \end{cases}$
3. $\begin{cases} 4x-y &= 8 \\ 3x+2y &= 6 \end{cases}$
4. $\begin{cases} x+4y &= 8 \\ x-2y &= 2 \end{cases}$
5. $\begin{cases} x+y=5 \\ y=5x+\frac{1}{2} \end{cases}$

Lesson 1.8.3: Solving Systems of Linear Equations by Graphing

Using the Intercept Method

1. Graph the equations in the same coordinate plane.
2. Determine the coordinates of all the points common to the graphs.

Practice Exercises 1.8.3

Find the solutions of the following systems of linear equations graphically.

1. $\begin{cases} x+y &= 12 \\ x-y &= 8 \end{cases}$
2. $\begin{cases} 3x+6y &= 4 \\ 6x+12y &= 8 \end{cases}$
3. $\begin{cases} 8 &= x+y \\ -4 &= x-y \end{cases}$
4. $\begin{cases} x+y &= 3 \\ x+y &= -2 \end{cases}$
5. $\begin{cases} x-8y &= 2 \\ 3x-24y &= 6 \end{cases}$

Activity 1.8.3

Find the solutions of the following systems of linear equations graphically.

1. $\begin{cases} y &= \frac{2}{3}x+6 \\ y &= -\frac{3}{2}x+6 \end{cases}$
2. $\begin{cases} x+y &= 7 \\ x-y &= 1 \end{cases}$
3. $\begin{cases} 4x-y &= 8 \\ 3x+2y &= 6 \end{cases}$
4. $\begin{cases} x+4y &= 8 \\ x-2y &= 2 \end{cases}$
5. $\begin{cases} x+y=5 \\ y=5x+\frac{1}{2} \end{cases}$