

## Coreq Support for Section 12.1

### **Objective 1: Determining Whether an Ordered Pair is a Solution** **(Video: Solving Systems of Linear Equations by Graphing 0:00 – 3:55)**

A system of linear equations consists of two or more linear equations. In this course, we focus on solving systems of linear equations containing two equations in two variables.

Recall that a solution of an equation in two variables is an ordered pair  $(x, y)$  that makes the equation true. A **solution of a system** of two equations in two variables is an ordered pair  $(x, y)$  that makes both equations true.

### **Objective 2: Solving Systems of Linear Equations by Graphing** **(Video: Solving Systems of Linear Equations by Graphing 3:56 - 15:49)**

Since a solution of a system of two equations in two variables is a solution common to both equations, it is also a point common to the graphs of both equations. We can estimate the solution(s) of a system of equations by graphing each equation on the same coordinate system and estimating the coordinates of any point of intersection.

**Objective 3: Writing Word Phrases As Algebraic Expressions**  
**(Video: Simplifying Algebraic Expressions 15:20 – 19:46)**

When presented with a problem, it is often useful to translate word phrases into algebraic expressions.