**Name: Date:**

**Solving Systems of Equations**

**Advanced Algebra**

**Chapter 6: Systems of Equations**

Here is an example of a system of two equations in and .

A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of this system is an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that satisfies each equation in the system.

Finding the set of all solutions is called a **solution set**. For instance, the ordered pair **(x, y)** is a solution of this system.

To check the solution you can substitute \_\_\_\_ for and \_\_\_\_ for in each equation.

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In this chapter we will study three ways to solve equations, beginning with the **method of substitution.**

Example 1: Solve the following system of equations.

Example 2: Solve the following system using substitution. Check your answers.

Example 3: Solve the following system using substitution. Check your answers.

Example 4: Solve the following system using substitution. Check your answers.

Example 5: Graphically Approach to Finding Solutions

The solutions of the system correspond to the **points of intersection** of the graphs.

a.



b.



c.



**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Advanced Algebra Classwork/Homework**

**Solve each Systems of Equations and check your solutions:**

1.   2. 

3.  4. 