**SOLVING SYSTEMS OF EQUATIONS BY GRAPHING**

System of equations:two or more equations with the same number of variables as equations.

Solution: any ordered pair that makes all of the equations in the system true.

1. **Graph the following equations on the same graph and find the solution to the system of equations:**

**y = 2x -7**

**y = 1**

**a) What solution did you find?**

**b) To check: Plug your solution(s) into each equation to see if it works.**

**c) Consider the point (5, 3). Does it work in the 1st equation? The 2nd? Is this a solution to the system?**

**2. Graph and find the solution:**

**y = 3 x - 6**

**4**

**y = 3x + 1**

**4**



1. **What is the solution to this system?**
2. **Explain why you came to this conclusion.**

**3. Graph and find the solution:**

**2x + y = 6**

**y = -2x + 6**

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**a) What is the solution to this system?**

**b) Explain why you came to this conclusion.**

**4. Summarize the number of possible solutions to a system of two equations in two variables and explain how each possibility could occur.**