Vocabulary: Solving Linear Systems (Standard Form)



**Vocabulary**

* Elimination method – an algebraic method for solving systems of equations that involves adding or subtracting the two equations to eliminate one of the variables.
* Solution – a value or values that make an equation or system of equations true.
* For example, (2, 7) is a solution of the equation *y* = 3*x* + 1 because it makes the equation true: 7 = 3(2) + 1.
* Standard form (of a linear equation) – a linear equation of the form *Ax* + *By* = *C*, where *A*, *B*, and *C* are real numbers, and *A* and *B* are not both zero.
* Substitution method – an algebraic method for solving systems of equations that involves solving one equation for a variable and substituting the resulting expression into the other equation.
* System of linear equations – a set of two or more linear equations that contain the same variables.
* A system of linear equations can have one solution, no solution, or infinitely many solutions, as shown below:

|  |  |  |  |
| --- | --- | --- | --- |
| **Graph** | Intersecting lines120Vocab2 | Same line120Vocab3 | Parallel lines120Vocab4 |
| **Number of solutions** | exactly one | infinitely many | none |
| **Type of system** | consistent and independent | consistent and dependent | inconsistent |