## 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 $A x+B y=C$, 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 | Same line | Parallel lines |  |
| :---: | :---: | :---: | :---: |
| Number of <br> solutions | exactly one | infinitely many | none |
| Type of <br> system | consistent and <br> independent | consistent and <br> dependent | inconsistent |

