## VOCABULARY

| coefficient | the constant preceding the variables in a product |
| :---: | :---: |
| consistent equations | A system of linear equations that contain at least one common point. |
| dependent equations | A system of linear equations that rely on each other for the algebraic or graphic form of the equation. |
| determinant | the value of: (row 1, column 1)(row 2 column 2) - (row 1, column 2 )(row 2 , column 1 ) in a 2 by 2 matrix |
| equivalent equations | equations having all common solutions |
| inconsistent equations | A system of linear equations that do not contain any common points. |
| independent equations | A system of linear equations that do not rely on each other for the algebraic or graphic form of the equation. |
| infinitely many solutions | A set of linear equations that coincide and share every point as a point of intersection. Also known as a dependent and consistent solution. |
| linear inequality | an open sentence of the form $A x+B y+C<0$ or $A x+B y+C$ $>0$ |
| matrix | a rectangular array made up of rows and columns |
| no solution | A set of parallel lines that will never share a point of intersection. Considered to be an inconsistent solution. |


|  | A set of linear equations that share a common point known <br> as the point of intersection $(x, y)$. The solution, $(x, y)$ is an <br> independent and consistent solution. |
| :--- | :--- |
| standard form | the form $A x+B y=C$ of a linear equation <br> substitute |
| replace a quantity with its equal |  |
| system determinant | the determinant found when column 1 consists of the <br> linear system |
| x-determinant | the determinant found when column 1 consists of the <br> constants and column 2 consists of the $y$-coefficients of a <br> linear system |
| $y$ y-determinant | the determinant found when column 1 consists of the <br> x-coefficients and column 2 consists of the constants of a <br> linear system |

