## Box and Whisker Plot

## Continuous

## Cubic

## Domain

## Expression

$f(x)=$

Frequency

## Inequalities

## Inequality $<$ and $\leq$

Inequality $>$ and $\geq$

A graph that displays the highest and lowest quarters of data as whiskers, the middle two quarters of the data as a box, and the median

A graph the goes on without a break. Where is breaks, it is NOT continuous and that X VALUE!

A pattern that raise the terms to the 3 rd power. $x^{\wedge} 3$
Perfect Cubes: 1, 8, 27, 64, 125...

The x -coordinates of the set of points on a graph. The domain is the INPUT! most left point $<=\mathrm{x}<=$ right point

A real world problem with variables.
Think - What OPERATION (+-*/) would you use if you knew the numbers?

This is the name of the function. Just plug in the x value into the OTHER SIDE and simplify with the calculator.

## How often something occurs, usually used in simulations to collect data

$<$ (less than), $\leq$ (less than or equal to) - Used when you need to stay under a Budget/limit - shade BELOW on a graph
$>$ (greater than), , $\geq$ (greater than or equal to)

- Used to find ATLEAST something.
- Shade ABOVE on a graph


## Interquartile Range

## Linear

## Matrix

## Mean

## Measures of Central Tendency

## Median

## Min and Max Values (Graph)

## Misleading Graphs

## Mode

the difference between the first and third quartiles
Q3-Q1 - the length of the "box" in a Box \& Whisker Plot
a relationship whose graph is a straight line with a constant slope (change). A linear pattern add/subtracts by the same number.
an organized way to display data.
*Also can be used to solve Systems of Equations in Standard Form using the Calculator
the average of a data set, obtained by adding all of the data and then dividing by the total number
mean, median, mode
the middle score in an ordered set of data; half the scores are above it and half are below it

The minimum is the lowest $y$-value on a graph. The maximun is the highest $y$-value on a graph.
when any part of a graph is misleading. Check the Axises! Usually uneven spacing or incorrect scale or label.

## The number that occurs most often in a set of data

lines that will never intersect - No solution!
The SLOPES are the SAME!

Probability

Mathematical chance something will happen.
Number of desired outcomes / number of total outcomes. It is usually a fraction, but can be decimal or percent.

Two ratios set equal to each other to find an EXPECTED value. Cross multiply to solve.
values that divide a set of data into four equal parts Q1 - first (lower) quartile Q3 - third (upper) quartile
the largest and smalles values of the set of data maximum value-minimum value $=$ data range

The y-coordinates of the set of points on a graph. The range is the OUTPUT! MIN <=y

$$
<=\mathrm{MAX}
$$

# Simple Random Sample 

## Simulations

## Slope

## Slope-Intercept form

## Standard Form

Every member of the population has a known and equal chance of selection

A probability experiment to model a real world situation. Usually use dice, spinners, number generators, etc.

The steepness of a line on a graph, equal to its vertical change (rise) divided by its horizontal change (run).
$\mathrm{y}=\mathrm{mx}+\mathrm{b}$, where m is the slope and b is the $y$-intercept of the line.

When a linear equation is in this form:
\#x+\#y=\#

- need to transform to $\mathrm{y}=$ find SLOPE!


## System of Equations

Zeros

TWO linear equations using the same variables.
Solution is where the LINES intersect!
*Can use " $\mathrm{y}=$ " and "Matrix" in Calculator to solve.
points that crosses the x -axis

