1.1 Graphs and Graphing Utilities

• Read this review section in your textbook (Section 1.1)

A. Graphs of Equations (Idea)

1. Make a table of (x, y) points by plugging in numbers for x and figuring out y.
2. Plot the points on a grid.
3. Connect the dots.

B. Intercepts

x-intercept: x-value where graph crosses the x-axis

y-intercept: y-value where graph crosses the y-axis

To find:

To find x-intercept(s): set $y = 0$

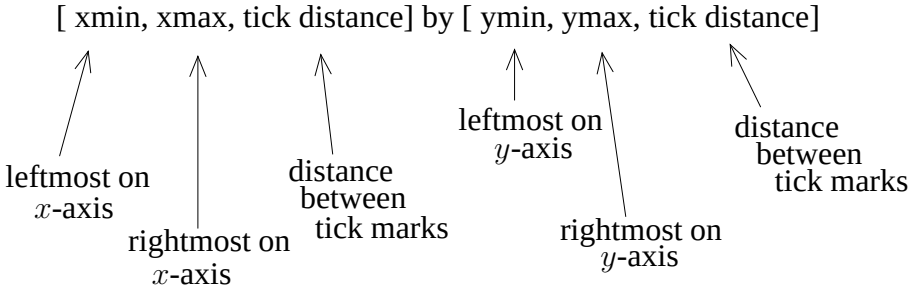
To find y-intercept(s): set $x = 0$

Example: $2x + 3y = 6$

Then $x = 0 \implies 3y = 6 \implies y = 2$ y-intercept

Then $y = 0 \implies 2x = 6 \implies x = 3$ x-intercept

C. Calculator Graphing Window Notation



Example: [-10,5,5] by [-3,4,1]

means: