

Placing the variables on the same side of an equation, we get the

General Form of an Equation of a Line

$$Ax + By = C$$

We noticed, very importantly, the y-intercept occurs when $x = 0$. Looking at the previous graphs, notice the x-intercept occurs when $y = 0$.

Those two pieces of information make graphing linear equations very easy!

Graphing the General Form of the Equation of a Line – By Inspection

The Cover-Up Method

1. Find x-intercept, let $y = 0$
2. Find y-intercept, let $x = 0$
3. Draw line to connect points

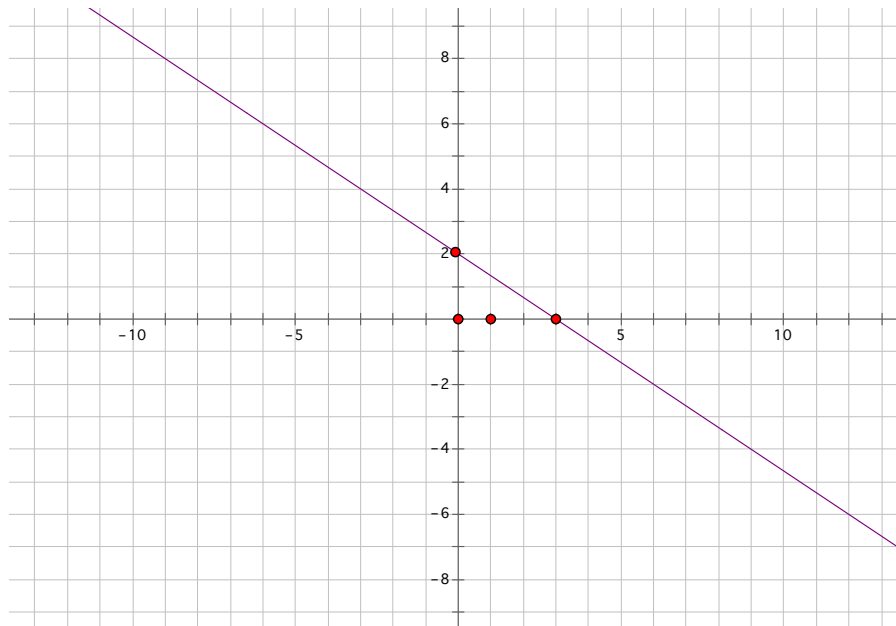
Example

Graph $2x + 3y = 6$

When $y = 0$, $2x = 6$ therefore the x-int. = 3

When $x = 0$, $3y = 6$, therefore y-int. = 2

Plot (3, 0) and (0, 2) and you're done. That beats solving for y and plugging in values for x.



Example Graph $3x - 4y = 12$