1) The ‘Table of 3 Values’ Method

1) Choose 3 values of x and draw up a wee table,
2) Work out the y-values,
3) Plot the coordinates, and draw the line.

If it’s a straight line equation, the 3 points will be in a dead straight line with each other, which is the usual check you do when you’ve drawn it — if they aren’t, then it could be a curve and you’ll need to add more values to your table to find out what on earth’s going on.

EXAMPLE: “Draw the graph of \( y = 2x - 3 \)”

1) Draw up a table with some suitable values of x. Choosing \( x = 0, 2, 4 \) is usually OK. i.e.

<table>
<thead>
<tr>
<th>x</th>
<th>0</th>
<th>2</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>y</td>
<td>-3</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

2) Find the y-values by putting each x-value into the equation:

(e.g. When \( x = 4, \quad y = 2x - 3 = 2 \times 4 - 3 = 5 \) )

3) Plot the points and draw the line.
2) The ‘x = 0’, ‘y = 0’ Method

1) Set $x=0$ in the equation, and find $y$ — this is where it crosses the y-axis.
2) Set $y=0$ in the equation and find $x$ — this is where it crosses the x-axis.
3) Plot these two points and join them up with a straight line — and just hope it should be a straight line, since with only 2 points you can't really tell, can you!

**EXAMPLE:** "Draw the graph of $5x + 3y = 15$"

Putting $x = 0$ gives $3y = 15$ ⇒ $y = 5$
Putting $y = 0$ gives $5x = 15$ ⇒ $x = 3$

So plot $(0, 5)$ and $(3, 0)$ on the graph and join them up with a straight line.