M8 - 9.1 - Plotting Points Graph Notes

(x, y) A point on a graph is given by an "ordered pair"

 $\begin{array}{ccc}
x & y \\
\downarrow & \downarrow \\
(3,4) & (x,y)
\end{array}$

Plot the following table of values:

| | y | Ordered Pairs | <i>y</i> -axis | | | | | | |
|----|----|------------------|----------------|---------|-------|------------------------|--------|---------|----------|
| x | | | | | | 6 † y | | | |
| 2 | -3 | (2,-3) $(-4,-1)$ | | (-3 | ,5) | 5 | | | |
| -4 | -1 | (-4, -1) | | () | ,-, | 4 | (2,3) | | |
| -3 | 5 | (-3,5) | | | | 3+ | | | |
| 0 | 0 | (0,0) | | | | 2 | | | |
| 4 | 0 | (4,0) | | | | 1+ | | | x |
| 0 | -3 | (0, -3) | -6 -5 | -4 -3 | -2 -1 | (0,0) | 2 3 | 4 (4,0) | x-axis |
| | | | | (-4,-1) | | -1- | | | |
| | | | | | | -3 (0,-3) | (2,-3) | | |
| | | | | | | -4 ⁺ (0, 3) | (2, 3) | | |

Steps to plot a point:

- 1. Find the x location on the x-axis. (The number in the left of the brackets.)
- 2. Go straight up or down to the *y* value. (The number on the right of the brackets).
- 3. Draw and label the point.