## **Equations of Lines – Slope-Intercept**

y = mx + b

By looking at enough graphs of equations of lines, a pattern would emerge showing that a graph crosses the y-axis (y-intercept) when the value of x is zero. So **b** would be the y-intercept. Once you know the y-intercept, you use the slope to count up and over to find another point.

- 1. Find the y-intercept and the slope of y = 2x + 3
- 2. Find the y-intercept and slope of the y = 3x 2
- 3. Find the y-intercept and slope of y = -2x + 4
- 4. Find the y-intercept and slope of y = -3x 2
- 5. Find the y-intercept and slope of  $y = \frac{2}{3}x + 4$
- 6. Find the y-intercept and slope of  $y = \frac{-2}{5}x + 4$
- 7. Find the y-intercept and slope  $y = \frac{-2}{5}x 1$
- 8. Write the following equation in slope-intercept form, 3x + y = 8
- 9. Write the following equation in slope-intercet form, 5x + y = -7
- 10. Write the following equation in slope-intercept form, 3x y = 4

11.	Write the following equation in slope-intercept form, $2x - y = 10$
12.	Write the following equation in slope-intercept form, $3x + 2y = 6$
13.	Write the following equation in slope-intercept form, $4x + 3y = 12$
14.	Write the following equation in slope-intercept form, $4x + 5y = 9$
15.	Write the following equation in slope-intercept form, $2x + 3y = 5$
16.	Write the following equation in slope-intercept form, $2x - 3y = 7$
17.	Write the following equation in slope-intercept form, $5x - 3y = 8$