## Equations of Lines - Slope-Intercept

$y=m x+b$

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 $\mathbf{b}$ 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 $y=2 x+3$
2. Find the $y$-intercept and slope of the $y=3 x-2$
3. Find the $y$-intercept and slope of $y=-2 x+4$
4. Find the $y$-intercept and slope of $y=-3 x-2$
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, $3 x+y=8$
9. Write the following equation in slope-intercet form, $5 x+y=-7$
10. Write the following equation in slope-intercept form, $3 x-y=4$
11. Write the following equation in slope-intercept form, $2 \mathrm{x}-\mathrm{y}=10$
12. Write the following equation in slope-intercept form, $3 x+2 y=6$
13. Write the following equation in slope-intercept form, $4 x+3 y=12$
14. Write the following equation in slope-intercept form, $4 x+5 y=9$
15. Write the following equation in slope-intercept form, $2 x+3 y=5$
16. Write the following equation in slope-intercept form, $2 x-3 y=7$
17. Write the following equation in slope-intercept form, $5 x-3 y=8$
