Graphing Slope-Intercept by Inspection

$$y = mx + b$$

Algorithm

1. Identify the y_{int} (b) and plot
2. From the y_{int}, use the slope (m) to find second point
3. Draw a line through the two points

Example: Graph $y = 2x + 1$

1. The y_{int} is 1 – (0, 1)
2. $m = 2 = \frac{2}{1}$, from (0, 1) go up 2 over 1 (1, 3)
3. Draw line through (0, 1) and (1, 3)

Use the Slope Intercept form of a line to graph the following by inspection

1. Graph and find the y-intercept and the slope of $y = 2x + 3$

2. Graph and find the y-intercept and slope of the $y = 3x – 2$

3. Graph and find the y-intercept and slope of $y = –2x + 4$

4. Graph and find the y-intercept and slope of $y = –3x – 2$

5. Graph and find the y-intercept and slope of $y = \frac{2}{3}x + 4$

6. Graph and find the y-intercept and slope of $y = \frac{-2}{5}x + 4$

7. **Graph and 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-intercept 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,**
$x + y = 7$

12. **Write the following equation in slope-intercept form,**
$x - y = 7$

13. **Write the following equation in slope-intercept form,**
$4x + 2y = 8$