**Linear Functions: Slope-Intercept Form Notes**

**Slope-Intercept Form: y = mx + b**

**Y = output m = slope x = input b = y-intercept**

 **Write an equation of a line in slope-intercept form with a slope of and a *y*-intercept of 8.**

*y = mx + b* Slope-intercept form

*y = x* + 8 Replace *m* with and *b* with 8.



 **Graph the equation** ***y* = − *x* + 1.**

Find the slope and *y*-intercept.

*y* = − *x* + 1 slope = $-\frac{4}{3}$, *y-*intercept = 1

Graph the *y*-intercept at (0, 1).

Use the slope to locate a second point on the line. Go down 4 units and right 3 units. Then draw a line through the points.

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