

Point-Slope Form into Slope Intercept Form

- The **point slope form** of a line is of the form $y - y_1 = m(x - x_1)$.
- m is the slope and (x_1, y_1) is a point on the line.
- The **slope-intercept** form of a line is $y = mx + b$.

The important thing to be aware of is the changing of the signs when the point is put in the formula. Use the given information and first write the line described in **point-slope form**. When completed with **point-slope form** put the line into **slope-intercept** and also determine the *y-intercept*.

1. $m = 2$ through the point $(4, -3)$.

2. $m = -3$ through the point $(-7, 2)$.

3. $m = -1$ through the point $(6, -2)$.

4. $m = 4$ through the point $(7, 0)$.

5. $m = \frac{1}{5}$ through the point $(-5, 1)$.

6. $m = \frac{1}{2}$ through the point $(-2, -4)$.