

Writing Lines in Point-Slope 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 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 write the line described in *point-slope form*.

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

8. $m = 2$ through the point $(-5, -6)$.

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

9. $m = -2$ through the point $(3, 5)$.

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

10. $m = 2$ through the point $(5, -2)$.

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

11. $m = 4$ through the point $(0, 9)$.

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

12. $m = \frac{1}{4}$ through the point $(-3, -2)$.

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

13. $m = 0$ through the point $(1, -3)$.

7. $m = -\frac{4}{7}$ through the point $(5, -4)$.

14. $m = -\frac{1}{2}$ through the point $(0, 0)$.