

Point-Slope Form (Determining the Slope and a Point)

- 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.

For each of the following lines state the **slope** and a **point** the line passes through.

1. $y + 1 = 4(x - 2)$

6. $y + 7 = 5(x + 7)$

2. $y - 3 = -2(x + 3)$

7. $y - 5 = 4(x + 1)$

3. $y - 9 = (x - 5)$

8. $y - 2 = -\frac{2}{3}(x - 4)$

4. $y = -5(x - 2)$

9. $y = (x - 4)$

5. $y - 6 = \frac{1}{2}(x + 0)$

10. $y + 2 = \frac{1}{3}(x - 2)$