

Objective: Write the equation of a line in slope point form.

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

given $m = \frac{2}{3}; (6, 5)$

$$(y - y_1) = m(x - x_1)$$

point - slope form $(y - 5) = \frac{2}{3}(x - 6)$

1. $m = \frac{1}{2}; (0, 4)$

2. $m = -3; (-2, 4)$

3. $m = -\frac{1}{3}; (-6, 3)$

4. $m = 5; (-2, -5)$

5. $m = -\frac{4}{3}; (-9, 8)$

6. $m = \frac{2}{5}; (5, 10)$

7. $m = \frac{2}{5} \quad (1, 7)$

8. $m = \frac{1}{2} \quad (-5, -3)$

9. $m = 0 \quad (1, 6)$

10. $m = \textit{undefined} \quad (-4, 3)$