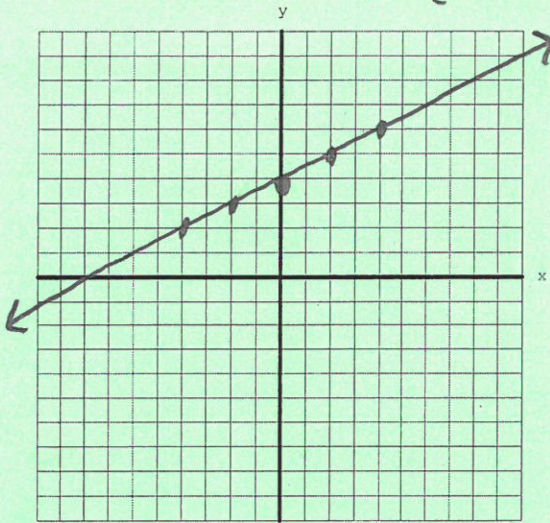


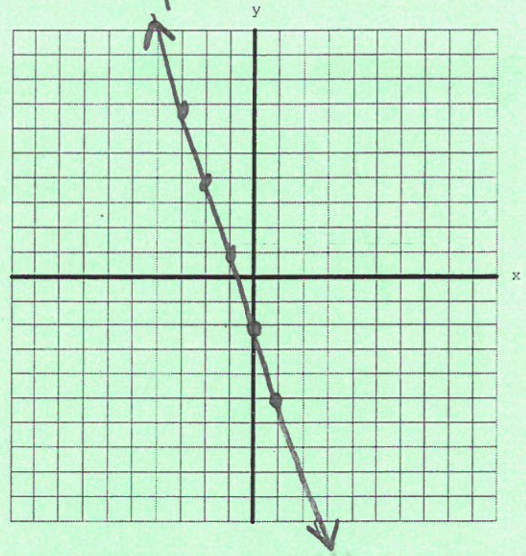
Key

Objective: Sketch a graph from the given slope and point, then create an equation in slope-intercept form.

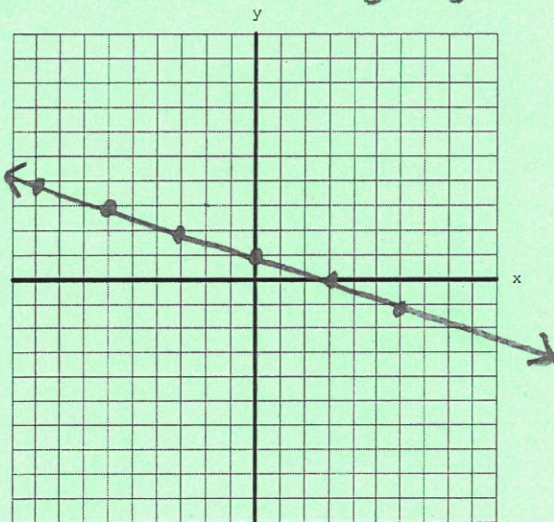
1. $m = \frac{1}{2}; (0, 4)$ $y = \frac{1}{2}x + 4$



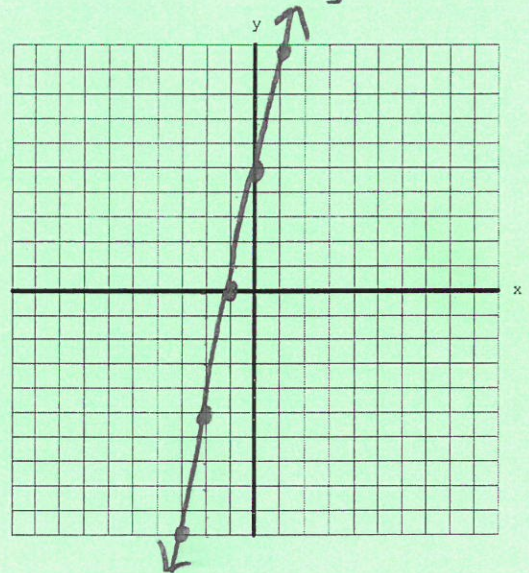
2. $m = -\frac{3}{1}; (-2, 4)$ $y = -3x - 2$



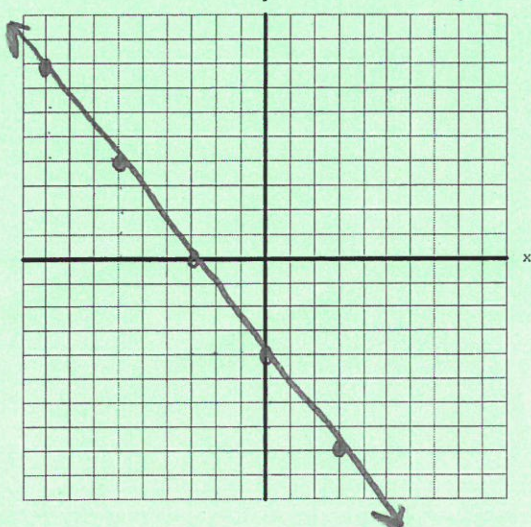
3. $m = -\frac{1}{3}; (-6, 3)$ $y = -\frac{1}{3}x + 1$



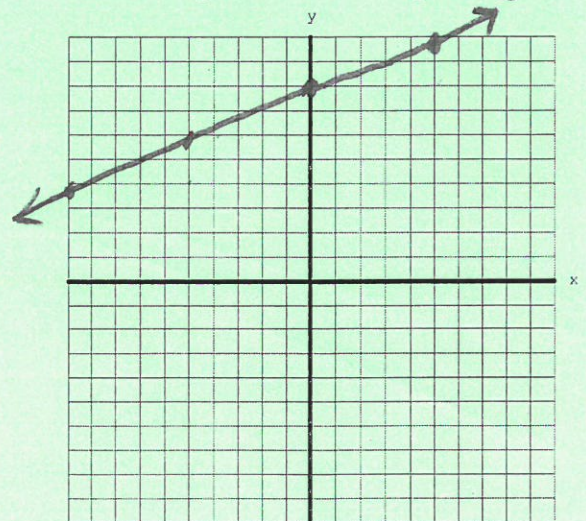
4. $m = 5; (-2, -5)$ $y = 5x + 5$



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



6. $m = \frac{2}{5}; (5, 10)$ $y = \frac{2}{5}x + 8$



Write an equation in slope intercept form with the given slope, and through the given point.

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

$$y = mx + b$$

$$7 = \frac{2}{5}(1) + b$$

$$7 = \frac{2}{5} + b$$

$$\frac{35}{5} - \frac{2}{5} = b$$

$$b = \frac{33}{5}$$

$$y = \frac{2}{5}x + \frac{33}{5}$$

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

$$-3 = \frac{1}{2}(-5) + b$$

$$-3 = -\frac{5}{2} + b$$

$$-\frac{6}{2} + \frac{5}{2} = b$$

$$b = -\frac{1}{2}$$

$$y = \frac{1}{2}x - \frac{1}{2}$$

9. $m = \frac{1}{5}$ (1,6)

$$6 = \frac{1}{5}(1) + b$$

$$6 = \frac{1}{5} + b$$

$$\frac{30}{5} - \frac{1}{5} = b$$

$$b = \frac{29}{5}$$

$$y = \frac{1}{5}x + \frac{29}{5}$$

10. $m = \frac{4}{5}$ (-4,0)

$$0 = \frac{4}{5}(-4) + b$$

$$0 = -\frac{16}{5} + b$$

$$b = \frac{16}{5}$$

$$y = \frac{4}{5}x + \frac{16}{5}$$

11. $m = 4$ (6,-2)

$$-2 = 4(6) + b$$

$$-2 = 24 + b$$

$$b = -26$$

$$y = 4x - 26$$

12. $m = -\frac{3}{4}$ (3,-8)

$$-8 = -\frac{3}{4}(3) + b$$

$$-8 = -\frac{9}{4} + b$$

$$-\frac{32}{4} + \frac{9}{4} = b$$

$$b = -\frac{23}{4}$$

$$y = -\frac{3}{4}x - \frac{23}{4}$$