Name: Date:

Point Slope Form Given Point and Slope

Write an equation of the line in point-slope form: $y - y_1 = m(x - x_1)$.

Use the given slope m and point (x_1, y_1).

1. slope $= 4$, point $(2, -1)$

2. slope $= -3$, point $(5, 6)$

3. slope $= \frac{1}{2}$, point $(-4, 8)$

4. slope $= -\frac{2}{3}$, point $(3, -7)$

5. slope $= 7$, point $(-1, -5)$

6. slope $= -\frac{5}{4}$, point $(0, 9)$

7. slope $= \frac{3}{5}$, point $(10, 2)$

8. slope $= -1$, point $(-6, 4)$

9. slope $= \frac{4}{3}$, point $(1, 0)$

10. slope $= -\frac{1}{6}$, point $(12, -3)$

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Use the given slope m **and point** (x_1, y_1).

1. slope $= 4$, point $(2, -1)$

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

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

2. slope $= -3$, point $(5, 6)$

$y-6 = -3(x-5)$

3. slope $= \frac{1}{2}$, point $(-4, 8)$

$y - 8 = \frac{1}{2}(x - (-4))$

$y - 8 = \frac{1}{2}(x + 4)$

4. slope $= -\frac{2}{3}$, point $(3, -7)$

$y-(-7) = -\frac{2}{3}(x-3)$

$y+7 = -\frac{2}{3}(x-3)$

5. slope $= 7$, point $(-1, -5)$

$y - (-5) = 7(x - (-1))$

$y + 5 = 7(x + 1)$

6. slope $= -\frac{5}{4}$, point $(0, 9)$

$y-9 = -\frac{5}{4}(x-0)$

7. slope $= \frac{3}{5}$, point $(10, 2)$

$y-2 = \frac{3}{5}(x-10)$

8. slope $= -1$, point $(-6, 4)$

$y - 4 = -1(x - (-6))$

$y - 4 = -1(x + 6)$

9. slope $= \frac{4}{3}$, point $(1, 0)$

$y-0 = \frac{4}{3}(x-1)$

10. slope $= -\frac{1}{6}$, point $(12, -3)$

$y-(-3) = -\frac{1}{6}(x-12)$

$(y+3) = -\frac{1}{6}(x-12)$