Point-slope Form

Write the equation of the line whose slope and the point through which it passes are given. Express the equation in point-slope form.

1) $(-2, 3)$ and slope $m = 9$

2) $(4, 0)$ and slope $m = -7$

3) $(-7, -4)$ and slope $m = 6$

4) $(8, -1)$ and slope $m = -3$

5) $(1, 1)$ and slope $m = 0$

6) $(-5, -6)$ and slope $m = \dfrac{3}{8}$

7) $(-9, 0)$ and slope $m = -\dfrac{7}{4}$

8) $(-3, 8)$ and slope $m = -1$

9) $(-8, 1)$ and slope $m = -6$

10) $(-2, 0)$ and slope $m = 4$

Point-slope Form

Write the equation of the line whose slope and the point through which it passes are given. Express the equation in point-slope form.

1) (−2, 3) and slope m = 9

y − 3 = 9(x + 2)

2) (4, 0) and slope m = −7

y = −7(x − 4)

3) (−7, −4) and slope m = 6

y + 4 = 6(x + 7)

4) (8, −1) and slope m = −3

y + 1 = −3(x − 8)

5) (1, 1) and slope m = 0

y − 1 = 0

6) (−5, −6) and slope m = $\dfrac{3}{8}$

y + 6 = $\dfrac{3}{8}$(x +5)

7) (−9, 0) and slope m = $-\dfrac{7}{4}$

y = $-\dfrac{7}{4}$(x + 9)

8) (−3, 8) and slope m = −1

y − 8 = −(x + 3)

9) (−8, 1) and slope m = −6

y − 1 = −6(x + 8)

10) (−2, 0) and slope m = 4

y = 4(x + 2)