Equation of a Line

Find an equation of a line whose slope and point passes through a line. Express the equation in slope-intercept form.

1) slope = $\frac{3}{8}$ and (6, 0)

2) slope = −2 and (−1, 2)

3) slope = 1 and (3, 7)

4) slope = $-\frac{4}{5}$ and (0, −4)

5) slope = −7 and (−2, −2)

6) slope = 5 and (1, −3)

7) slope = $-\frac{8}{9}$ and (9, 5)

8) slope = 2 and (7, −6)

9) slope = $\frac{1}{3}$ and (−4, −1)

10) slope = −3 and (1, 1)

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Answer key

Find an equation of a line whose slope and point passes through a line. Express the equation in slope-intercept form.

1) slope = $\dfrac{3}{8}$ and (6, 0) $y = \dfrac{3}{8}x - \dfrac{9}{4}$	2) slope = −2 and (−1, 2) $y = -2x$
3) slope = 1 and (3, 7) $y = x + 4$	4) slope = $-\dfrac{4}{5}$ and (0, −4) $y = -\dfrac{4}{5}x - 4$
5) slope = −7 and (−2, −2) $y = -7x - 16$	6) slope = 5 and (1, −3) $y = 5x - 8$
7) slope = $-\dfrac{8}{9}$ and (9, 5) $y = -\dfrac{8}{9}x + 13$	8) slope = 2 and (7, −6) $y = 2x - 20$
9) slope = $\dfrac{1}{3}$ and (−4, −1) $y = \dfrac{1}{3}x + \dfrac{1}{3}$	10) slope = −3 and (1, 1) $y = -3x + 4$