

Review: Writing Linear Equations using Point-Slope Form

Write an equation of a line in Point-Slope Form. Then convert the equation to Slope-Intercept Form.

1) $m = 3$; passes through $(5, -2)$

2) $m = -\frac{5}{3}$; passes through $(-3, -5)$

3) $m = \frac{1}{4}$; passes through $(0, 8)$

4) passes through $(-1, 7)$ & $(8, -2)$

5) passes through $(6, 0)$ & $(0, 4)$

6) passes through $(5, 7)$ & $(-1, 6)$

Answers:

1) $y + 2 = 3(x - 5)$
 $y = 3x - 17$

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

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

4) $y - 7 = -1(x + 1)$ OR
 $y + 2 = -1(x - 8)$
 $y = -x + 6$

5) $y = -\frac{2}{3}(x - 6)$ OR
 $y - 4 = -\frac{2}{3}x$
 $y = -\frac{2}{3}x + 4$

6) $y - 7 = \frac{1}{6}(x - 5)$ OR
 $y - 6 = \frac{1}{6}(x + 1)$
 $y = \frac{1}{6}x + \frac{37}{6}$