

Question #54721, Math / Calculus

Consider the slope and point given below.

$$m = 1/3, P(-3, 8)$$

Find the slope-intercept form of the line with the given slope which passes through the given point. (Let y be the dependent variable and let x be the independent variable)

Answer.

Equation of the line through the point (x_1, y_1) : $y - y_1 = m(x - x_1)$

$$\text{So } y - 8 = \frac{1}{3}(x + 3) \rightarrow y = \frac{1}{3}x + 9$$