

$y - y_1 = m(x - x_1)$ POINT SLOPE FORM

Ⓐ $(3, 7)$, $m = \frac{1}{2}$ $y - 7 = \frac{1}{2}(x - 3)$

Ⓑ $(-7, -5)$, $m = -3$ $y + 5 = -3(x + 7)$

Nov 18-8:59 AM

$A_2 (3, 7)$ $m = \frac{1}{2}$ Slope Intercept form

① $y - 7 = \frac{1}{2}(x - 3)$

② $y - 7 = \frac{1}{2}x - \frac{3}{2} + \frac{7}{2}$

$y = \frac{1}{2}x + \frac{11}{2}$ \uparrow y-intercept

Math: $\frac{1}{2} \cdot -3 = -\frac{3}{2}$

Add: $-\frac{3}{2} + \frac{14}{2} = \frac{11}{2}$

Nov 18-9:16 AM

Perpendicular negative reciprocal slope = $-\frac{2}{1}$ $y = \frac{1}{2}x - 3$

Parallel slope = $\frac{1}{2}$

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

$y = \frac{1}{2}x + 164$

$y = \frac{1}{2}x - 1112$

Nov 18-9:26 AM

$(3, 7)$ $m = \frac{1}{2}$

$y - 7 = \frac{1}{2}(x - 3) + 3$

what are two points on this line? $(3, 7)$

slope = ? $\frac{1}{2}$

Nov 18-9:30 AM

9. $(-3, 1)$ parallel to $y = \frac{4}{3}x - 3$

slope = $\frac{4}{3}$

$y - y_1 = m(x - x_1)$

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

$y - 1 = \frac{4}{3}x + \frac{12}{3}$

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

$y = \frac{4}{3}x + 5$

Nov 18-10:26 AM

14. $(-4, 1)$ Perp. $y = 2x + 1$ slope = $\frac{2}{1}$

slope = $-\frac{1}{2}$

$y - y_1 = m(x - x_1)$

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

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

$y - 1 = -\frac{1}{2}x - 2$

$y + 1 = -\frac{1}{2}x - 2 + 1$

$y = -\frac{1}{2}x - 1$

$\frac{-1}{2} \cdot \frac{4}{1} = -\frac{4}{2}$

Nov 18-10:33 AM

$$\text{slope} = \frac{-4 - 5}{4 - 5} = \frac{-9}{-1}$$

#2. Through (0,1)

$$\text{slope} = \frac{4}{3} = \frac{9}{1} \text{ or } 9$$

Nov 18-10:45 AM



Nov 18-11:29 AM