

October 19, 2015

$(8, 16)$ & $(-20, 32)$

② $m = \frac{(32) - (16)}{(-20) - (8)}$
 $= \frac{16}{-28} = -\frac{4}{7}$

③ $y = m x + b$ ← find

$16 = [-\frac{4}{7} \cdot 8] + b$
 $16 = -\frac{32}{7} + b$
 $\frac{16}{1} + \frac{32}{7} = b$
 $\frac{112 + 32}{7} = b$
 $\frac{144}{7} = b$

$y = -\frac{4}{7}x + \frac{144}{7}$

Ch

$32 = [-\frac{4}{7} \cdot (-20)] + \frac{144}{7}$
 $32 = \frac{80}{7} + \frac{144}{7}$
 $32 = \frac{224}{7}$
 $32 = 32 \checkmark$

Oct 19-10:08 AM

③ Point-Slope

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

$y - (16) = (-\frac{4}{7})(x - (8))$

$y + 16 = -\frac{4}{7}x + \frac{32}{7} + \frac{16}{1}$

$y = -\frac{4}{7}x + \frac{32 + 112}{7}$

$y = -\frac{4}{7}x + \frac{144}{7}$

Oct 19-10:18 AM

$(-5, -7)$ & $(2, -3)$

Find Equation

① $y = m x + b$

② $y - y_1 = m(x - x_1)$

Oct 19-10:23 AM

$m = \frac{4}{7}$

$y - (-7) = \frac{4}{7}(x - (-5))$

$y + 7 = \frac{4}{7}(x + 5)$

$y + 7 = \frac{4}{7}x + \frac{20}{7} - 7$

$y = \frac{4}{7}x + \frac{20 - 49}{7}$

$y = \frac{4}{7}x - \frac{29}{7}$

Oct 19-10:38 AM

$y = \frac{m}{\text{slope}} x + \frac{b}{\text{y-Intercept}}$ slope-Intercept

$y\text{-int: } (0, 7) \rightarrow (0, b)$

$x\text{-int: } (7, 0)$

$y = \frac{3}{4}x + 7$

$m = \frac{3}{4}$ $(0, 7) \rightarrow y\text{-int}$

$y - 7 = \frac{3}{4}x$ $(-\frac{4}{3}, 0) x\text{-int}$

$(0 - 7 = \frac{3}{4}x)$

$(-7 = \frac{3}{4}x)$

$-\frac{28}{3} = \frac{3}{4}x$

$-\frac{28}{3} = x$

Oct 19-10:40 AM