

October 16, 2015

$$\{(-2, 6), (3, -9), (6, -2), (4, -7), (3, 8), (4, -3)\}$$

NO.  $(3, -9) \neq (3, 8)$

Domain:  $\{-2, 3, 6, 4, -6\}$

Oct 16-9:55 AM

$$p(x) = 2 - 3x \quad \frac{p(x+h) - p(x)}{h}$$

①  $p(x) = 2 - 3x$

②  $p(x+h) = 2 - 3(x+h)$

$$\frac{2 - 3(x+h) - (2 - 3x)}{h}$$

Oct 16-10:08 AM

$$f(x) = \frac{1}{x^2 - 9}$$

$$g(x) = \sqrt{x + 5}$$

$(f \circ g)(x)$

$(g \circ f)(x)$

$(f \circ g \circ f)(x)$

Oct 16-10:17 AM

$$f(x) = x^2 + 2x + 1$$

$$(f \circ f)(x) = f(f(x))$$

$$= (x^2 + 2x + 1)^2 + 2(x^2 + 2x + 1) + 1$$

$$(f \circ f \circ f)(x) = ((x^2 + 2x + 1)^2 + 2(x^2 + 2x + 1) + 1)^2 + 2((x^2 + 2x + 1)^2 + 2(x^2 + 2x + 1) + 1) + 1$$

Oct 16-10:10 AM

$(-7, 2) \neq (3, -5)$

①

②  $m = \frac{-5 - 2}{3 - (-7)} = \frac{-7}{10} = -\frac{7}{10}$

\* Find the points above & below  $(3, -5)$

$(3 + (-10), -5 + 7) = (-7, 2)$

$(3 + 10, -5 + (-7)) = (13, -12)$

Oct 16-10:18 AM

Find the equation

① need slope:  $-\frac{7}{10}$

② use  $y = mx + b$  (Slope-Intercept) Find!

$(-5) = -\frac{7}{10}(\frac{3}{1}) + b$

$-5 = -\frac{21}{10} + b$

$-\frac{5}{1} + \frac{21}{10} = b$

$-\frac{50 + 21}{10} = b$

$-\frac{29}{10} = b$

$y = -\frac{7}{10}x - \frac{29}{10}$

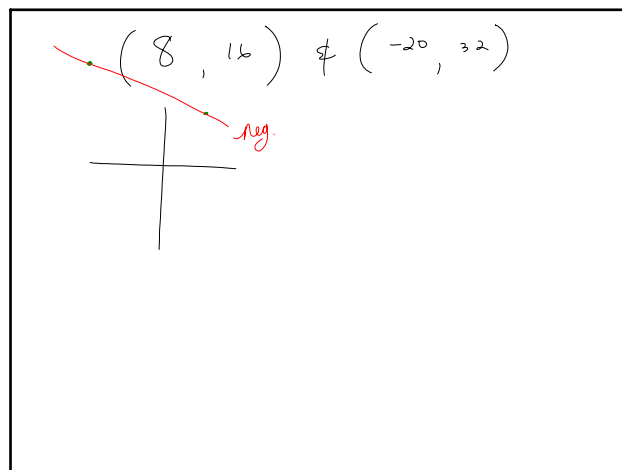
Oct 16-10:29 AM

Check

$$y = -\frac{7}{10}x - \frac{29}{10}$$

Use the other point:  $(-7, 2)$

Oct 16-10:36 AM



Oct 16-10:45 AM

a)  $y_1 = m x_1 + b$

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

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

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

$\begin{matrix} + \frac{16}{1} & & + \frac{16}{1} \end{matrix}$

Oct 16-10:48 AM