

1)

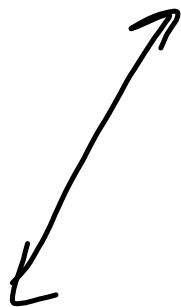
↑
Slope

↑
y-int.

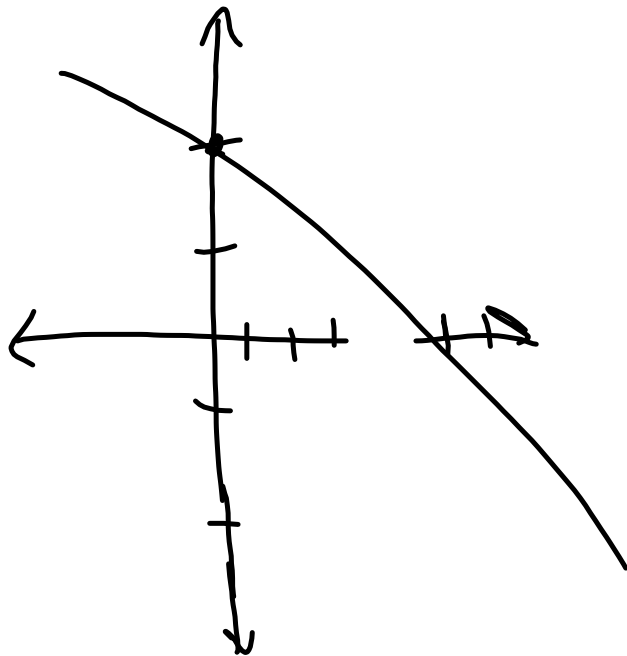
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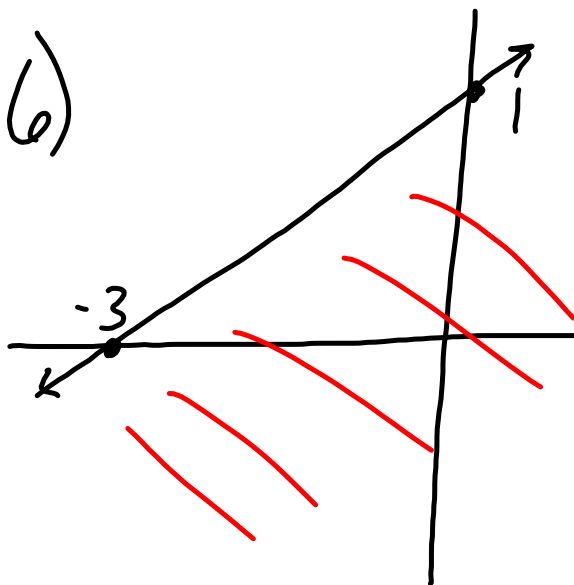
$$y = mx + b$$

$$y = 5x + 4$$



$$5) \quad x\text{-int} = 9 \quad y\text{-int} = 2$$





$$y = mx + b$$

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

$$-\frac{1}{3}x \quad -\frac{1}{3}x$$

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

$$-x + 3y = 3$$

$$7) f(x) = 4x - 3 \quad g(x) = x^2 + 4x + 3$$

$$f(2) = 4(2) - 3 \quad g(4) = 4^2 + 4(4) + 3$$
$$= 5 \quad = 16 + 16 + 3$$

$$5 - 35 = -30 \quad = 35$$

$$f+g = 4x-3 + (3x^2+2)$$
$$= 3x^2+4x-1$$

$$f(x) = 5x + 4 \quad g(x) = x^2 - 4$$

$$(f \circ g)(3) = f[g(3)] =$$

$$g(3) = 3^2 - 4 = 5$$

$$f(5) = 5(5) + 4 = 29$$

$$d = kr^2$$

$$60 = k(2)^2$$

$$60 = 4k$$

$$k = 15$$

$$d = 15r^2$$

$$d = 15(5)^2$$

$$= 15(25)$$

$$= 375$$

$$p = \frac{k}{w}$$

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

$$y - (-9) = 8(x - (-1))$$

$$y + 9 = 8x + 8$$

$$y = 8x - 1$$

$$m = \frac{-1 - (-\frac{1}{5})}{-\frac{1}{2} - \frac{1}{2}} = \frac{-\frac{4}{5}}{-1} = \frac{4}{5}$$

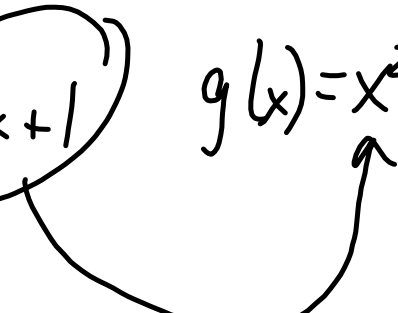
$$y - y_1 = m(x - x_1)$$

$$y - (-1) = \frac{4}{5} \left(x - \left(-\frac{1}{2}\right) \right)$$

$$y + 1 = \frac{4}{5}x + \frac{4}{10}$$

$$y = \frac{4}{5}x - \frac{6}{10}$$

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

$$f(x) = 2x+1 \quad g(x) = x^2 - 1$$


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

$$(2x+1)(2x+1) - 1$$

$$4x^2 + 4x + 1 - 1$$

$$y = \frac{k}{x^2}$$

$$y = \frac{648}{8^2}$$

$$72 = \frac{k}{8^2} \times 9$$

$$= 10.128$$

$$k = 648$$

