

$$f(x) = 7x - 1$$

$$g(x) = 3(x - 1)$$

$$h(x) = 2x^2 - 1$$

State the *dependent* and *independent* variable, then solve.

a) $h(2)$

$$h(a) = 2(a)^2 - 1$$

$$h(a) = 2(4) - 1$$

$$h(a) = 8 - 1$$

$$h(a) = 7$$

b) $h(3) - f(3)$

$$h(3) = 2(3)^2 - 1$$

$$= 2(9) - 1$$

$$= 18 - 1$$

$$h(3) = 17$$

$$f(3) = 7(3) - 1$$

$$f(3) = 21 - 1$$

$$f(3) = 20$$

$$17 - 20 = -3$$

c) $g(x) = 57$

$$57 = 3(x - 1)$$

$$57 = 3x - 3$$

$$\frac{60}{3} = \frac{3x}{3}$$

$$x = 20$$