

$$f(x) = 7x - 1 \quad g(x) = 3(x - 1)$$

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



$$h(x) = 12$$

? *ans* *x=12*

$$h(12)$$

$$f(x) = 7x - 1 \quad g(x) = 3(x - 1)$$

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

$y = 7x - 1$

a) $f(20)$

$$f(20) = 7x - 1$$

$$f(20) = 7(20) - 1$$

$$f(20) = 140 - 1$$

$$f(20) = 139$$

$$y = 139.$$

b) $f(x) = 20$

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

$$7x - 1 = 20 + 1$$

$$7x = 21$$

$$\frac{7x}{7} = \frac{21}{7}$$

$$x = 3$$

$$f(x) = 7x - 1 \quad g(x) = 3(x - 1)$$

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

c) $g(3)$

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

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

$$g(3) = 3(2)$$

$$g(3) = 6$$

d) $h(f(1))$ $h(6)$

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

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

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

$$f(1) = 6$$

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

$$h(6) = 2(6)^2 - 1$$

$$h(6) = 2(36) - 1$$

$$h(6) = 72 - 1$$

$$h(6) = 71$$

$$f(x) = 7x - 1 \quad g(x) = 3(x - 1)$$

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

e) $h(2) - f(3)$

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

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

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

$$h(2) = 8 - 1$$

$$h(2) = 7$$

$$7 - 20$$

$$= -13$$

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

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

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

$$f(3) = 20$$

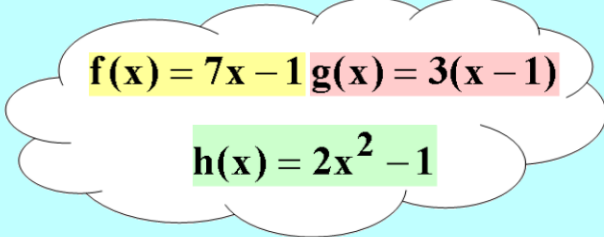
Try These !!

f) $g(-3)$

g) $f(g(-2))$

h) $h(-3)-f(2)$

i) $g(x) = 27$



$f(x) = 7x - 1$ **$g(x) = 3(x - 1)$**

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

$$f(x) = 7x - 1 \quad g(x) = 3(x - 1)$$

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

Try These !!

i) $g(x) = 27$

$$\begin{aligned} g(x) &= 3(x-1) \\ 27 &= 3(x-1) \\ 27 &= 3x-3 \\ 27+3 &= 3x \\ 30 &= 3x \\ 10 &= x \end{aligned}$$

f) $g(-3)$

$$\begin{aligned} g(x) &= 3(x-1) \\ g(-3) &= 3(-3-1) \\ g(-3) &= 3(-4) \\ g(-3) &= -12 \end{aligned}$$

g) $f(g(-2))$

$$\begin{aligned} g(x) &= 3(x-1) \\ g(-2) &= 3(-2-1) \\ g(-2) &= 3(-3) \\ g(-2) &= -9 \end{aligned}$$

$f(g(-2))$

$$\begin{aligned} f(-9) \\ f(x) &= 7x-1 \\ f(-9) &= 7(-9)-1 \\ f(-9) &= -63-1 \\ f(-9) &= -64 \end{aligned}$$

h) $h(-3)-f(2)$

$$\begin{aligned} h(x) &= 2x^2-1 & f(x) &= 7x-1 \\ h(-3) &= 2(-3)^2-1 & f(2) &= 7(2)-1 \\ h(-3) &= 2(9)-1 & f(2) &= 14-1 \\ h(-3) &= 18-1 & f(2) &= 13 \\ h(-3) &= 17 \end{aligned}$$

$h(-3)-f(2)$

$$\begin{aligned} 17 - 13 \\ 4 \end{aligned}$$