

Punto 1

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

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

$$f(x) = 3$$

$$f(x) = 0^2 + 3 \cdot 0 - 1$$

$$f(x) = 0 + 0 - 1$$

$$f(x) = -1$$

Punto 3

$$f(a+h) - f(a)$$

$$f(a+h) - f(a)$$

$$(a+h)^2$$

$$\frac{a+h}{a+h}$$

$$f(a+h) + f(a)$$

$$f = 2ah + h^2$$

Punto 4

$$f\left(\frac{a}{h}\right) + f(a)$$

$$f\left(\frac{a}{h}\right) + 2 + f(a) + 2$$

$$f\left(\frac{a^2}{h^2}\right) + f(a^2)$$

$$\frac{a^2 + a^2}{h^2} = \frac{4}{h^2}$$

$$f = 4\left(\frac{1}{h} + 1\right)$$

Punto 2

$$f(x) = \frac{0}{2} + 1 = 1$$