

Punto 1:

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

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

$$f(x) = 3$$

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

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

$$f(x) = -1$$

Punto 2:

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

$$F(x) = \frac{1}{2} + 1 = 3$$

$$F(x) = \frac{1}{2} + 1 = 1 \frac{1}{2}$$
$$\frac{5}{4}$$

$$F(x) = \frac{5}{2}$$

Punto 3:

Evalúe $f(a+h) - f(a)$ donde $f(x) = x^2$

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

$$f \cdot a+h^2 - f \cdot a^2$$

$$(a+h)^2$$

$$a+h$$

$$a+h$$

$$ah+h^2$$

$$\frac{f(a+h^2) - f(a)}{2a} = \frac{(ah+h^2)}{2a} = 2ah+h^2$$

Punto 4: Evalúe $f(\frac{a}{h}) + f(a)$ donde $f(x) = x+2$

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

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

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

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

$$4(\frac{1}{h}+1)$$