

## Quiz

1

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

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

2

$$f(x) = \frac{1}{2}^2 + 3 \cdot \frac{1}{2} = 1$$

$$f(x) = 1^2 + 3 \cdot 1 = 4$$

$$x^2(a+h) - x^2(a)$$

3

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

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

$$f(1) = \frac{1}{2} + 1 = 1.5$$

$$f\left(\frac{3}{2}\right)$$

$$f(a+h)^2 = (a^2 + 2ah + h^2)$$

$$a^2 + 2ah + h^2 - f(a) = a^2$$
$$f = 2ah + h^2$$





4

$$F\left(\frac{a}{h}\right) + f(a) \quad f(x) = x + 2$$

$$F(a) = a + 2$$

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

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

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