



PREFECTURA DE
PICHINCHA
¡Dejamos huella!

$$\textcircled{1} f(x) = \sin x^2$$
$$f'(x) = \cos x^2 (x^2)'$$
$$f'(x) = 2x \cos x^2 //$$

$$\textcircled{2} f(x) = (\sin x)^2$$
$$f'(x) = 2 (\sin x) (\sin x)'$$
$$f'(x) = 2 (\sin x) (\cos x)$$
$$f'(x) = 2 \cos x \sin x //$$

$\textcircled{3}$

$$g(x) = \sqrt{x^2 + 2x + 3}$$
$$g(x) = (x^2 + 2x + 3)^{1/2}$$
$$g'(x) = \frac{1}{2} (x^2 + 2x + 3)^{-1/2} (x^2 + 2x + 3)'$$
$$g'(x) = \frac{(x^2 + 2x + 3)^{-1/2} (2x + 2)}{2}$$

$$g'(x) = \frac{2(x+1)}{2(x^2 + 2x + 3)^{1/2}}$$

$$g'(x) = \frac{(x+1)}{(x^2 + 2x + 3)^{1/2}}$$

$$g'(x) = (x+1) (x^2 + 2x + 3)^{-1/2}$$

$$g''(x) = (x+1)' (x^2 + 2x + 3)^{-1/2} + (x^2 + 2x + 3)^{-1/2}' (x+1)$$

$$g''(x) = (1) (x^2 + 2x + 3)^{-1/2} - \frac{1}{2} (x^2 + 2x + 3)^{-3/2} (x^2 + 2x + 3)' (x+1)$$

$$g''(x) = \frac{1}{(x^2 + 2x + 3)^{1/2}} - \frac{(2x + 2)(x+1)}{2(x^2 + 2x + 3)^{3/2}}$$

$$g''(x) = \frac{1}{(x^2 + 2x + 3)^{1/2}} - \frac{(x+1)(x+1)}{2(x^2 + 2x + 3)^{3/2}}$$

$$g''(x) = \frac{x^2 + 2x + 3 - x^2 - 2x - 1}{(x^2 + 2x + 3)^{3/2}}$$

$$g'' = \frac{2}{(x^2 + 2x + 3)^{3/2}} //$$

Síguenos en:

 Prefectura de Pichincha

 Prefectura de Pichincha

 @PichinchaGob

 Prefectura de Pichincha