http://www.mbstudent.com/maths-examples.html

Function derivative example

Calculate the derivative of the following function:

$$f(x) = \sin^3 x + \cos^3 x$$

$$f(x) = (\sin x)^3 + (\cos x)^3$$

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

$$f'(x) = 3 \cdot (\sin^2 x \cdot \cos x - \cos^2 x \cdot \sin x)$$