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

Function derivative example

Calculate the derivative of the third degree of following function:

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

First derivative is following

$$f'(x) = 6 \cdot x + 4$$

Second derivative is following

$$f^{\prime\prime}(x)=6$$

Third derivative is following

$$f^{\prime\prime\prime}(x)=0$$