Answer on Question # 47078 – Math – Differential Calculus | Equations

Task:

Differentiate with respect to x:

$$f(x) = 8x^3 + x^2$$

    A. 8x^3−x

    B. 24x^2−2x

    C. 2x^2−2

    D. 8x^2−x

Solution:

$$\frac{d}{dx}(f(x)) = \frac{d}{dx}(8x^3 + x^2) = 24x^2 + 2x,$$

We applied differentiation rule for the sum of functions and differentiation of powers.