Answer on Question #47146 – Math – Differential Calculus | Equations

Differentiate with respect to x: f(x)=(ax3+bx)

3ax2+b
ax^2+b
3x^2+1
3ax^2+x

Solution

Using formulae $(x^n)' = nx^{n-1}$, $(f(x) + g(x))' = f'(x) + g'(x)$, $(af(x))' = a \cdot f'(x)$,

calculate

$(ax^3 + bx)' = (ax^3)' + (bx)' = 3ax^2 + b.$

Answer: $3ax^2 + b.$