

Answer on Question #47142 – Math – Differential Calculus | Equations

Find derivative of $f(x)=(7x^4-5x^3)$ with respect of x

$$7x^4-5x^3$$

$$28x^3-15x^2$$

$$28x^2-15x^2$$

$$7x^3-15x^2$$

Solution

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

calculate

$$(7x^4 - 5x^3)' = (7x^4)' - (5x^3)' = 7 \cdot 4 \cdot x^3 - 5 \cdot 3 \cdot x^2 = 28x^3 - 15x^2.$$

Answer: $28x^3 - 15x^2$