differentiate the following (2x2−7)

Solution

$(2x^2 - 7)' = (2x^2)' - (7)' = 2(x^2)' - 0 = 2 \cdot 2x = 4x.$

We used the following rules for differentiation:

$(f(x) - g(x))' = f'(x) - g'(x)$

$(af(x))' = a(f(x))'$, where a is constant,

and the following formulae:

$(x^n)' = nx^{n-1}$, where n is integer,

$(b)' = 0$, where b is a constant.