

Advanced Higher Maths
SQA 2017 Paper
Question 11



Given $y = x^{2x^3+1}$, use logarithmic differentiation to find $\frac{dy}{dx}$.
Write your answer in terms of x .

5

Answer:

$$x^{2x^3+1} \left(6x^2 \ln x + \frac{2x^3+1}{x} \right)$$