My error on the last Kahoot!

Problem: Find the derivative of

$$\frac{1}{12}x^4 + \frac{1}{6}x^3 + \frac{1}{2}x^2 + x + 1$$

Answer:

$$\frac{1}{3}x^3 + \frac{1}{2}x^2 + x + 1$$

which was "none of the above"

Problem I had MEANT to write ...

Answer I had marked as correct

$$\frac{1}{6}x^3 + \frac{1}{2}x^2 + x + 1$$

which is the derivative of a DIFFERENT FUNCTION:

$$\frac{1}{24}x^4 + \frac{1}{6}x^3 + \frac{1}{2}x^2 + x + 1$$

which is a truncation of a very important power series (infinite polynomial), the power series for