

Math

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1 Solve (100 points)

$$\frac{d}{dx} \left(\frac{\lim_{h \rightarrow \infty} \frac{(x+h)^3 - x^3}{h} \cdot \sum_{n=0}^{\infty} \frac{x^{n+1}}{n+1}}{\int_x^0 \ln(t) dt} \right)$$