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Ho, Weng Kin; Ho, Foo Him; Lee, Tuo Yeong

Exponential function and its derivative revisited.

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Summary: Most of the available proofs for $\frac{d}{dx}(e^x)$ rely on results involving either power series, uniform convergence or a round-about definition of the natural logarithm function $\ln(x)$ by the definite integral $\int_1^X \frac{1}{t}dt$, and are thus not readily accessible by high school teachers and students. Even instructors of calculus courses avoid showing the complete proof to their undergraduate students because a direct and elementary approach is missing. This short article fills in this gap by supplying a simple proof of the aforementioned basic calculus fact.

Classification: I25 I45 I55
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