

962-Q1-526

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Formalist Derivations of Exponential and Logarithmic Power Series.

We will examine typical 18th Century textbook derivations of the power series expansions for the natural logarithmic and exponential functions, in which the binomial theorem, applied to infinite and infinitesimal powers of a binomial, plays a central role. We will trace the origins of the technique to work of Edmond Halley (1695) and Henry Briggs (1624). (Received September 15, 2000)