**Liouville's Constant**

Liouville 's constant, sometimes also called Liouville's number, is the real number defined by

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| L=sum_(n=1)^infty10^(-n!)=0.110001000000000000000001... |

Liouville's constant is a decimal fraction with a 1 in each decimal place corresponding to a factorial n! and zeros everywhere else. Liouville constructed an infinite class of transcendental numbers using continued fractions, but the above number was the first decimal constant to be proven transcendental. However, Cantor subsequently proved that "almost all" real numbers are in fact transcendental.

Liouville's constant nearly satisfies

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| 10x^6-75x^3-190x+21=0, |

which has solution 0.1100009999..., but plugging x=L into this equation gives -0.0000000059... instead of 0.