

Re: reply to "Re:...conventions...,0^0=?"

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On Dec 9, 8:36 pm, lowlymather <sum_sk8r_d...@xxxxxxxx> wrote:

i thought you used l'hopital's rules here
 0^0
take natural log $\ln(0^0) = 0 \ln 0 = 0 * \text{infinity}$
 $0 * \text{infinity} = 0 * 1/0$

Only when taking limits.

Everywhere I've seen 0^0 used, it's been defined to be 1, such as in the formula for the Taylor series of a function:

$\sum (f^{(n)}(a)/n! (x-a)^n, n=0..infinity)$

The $n=0$ term, when $x=a$, is $f^{(0)}(a)/0! (a-a)^0 = f(a)*0^0$, and this needs to be $f(a)$, so 0^0 is defined as 1 with dealing with polynomials and series.

--- Christopher Heckman

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