

# The trinity theorem

Soumadeep Ghosh

Kolkata, India

## Abstract

In this paper, I describe the trinity theorem.

The paper ends with "The End"

## The trinity theorem

The trinity theorem states that for reals  $x, y$  and  $z$

$$2(x + y + z)e^{x+y+z} = \sum_{n=0}^{\infty} \sum_{r=0}^{\infty} \sum_{k=0}^{\infty} \frac{{}^{n+r-1}C_r {}^nC_k}{(n+r-1)!} (x^r y^k z^{n-k} + y^r z^k x^{n-k} + z^r x^k y^{n-k})$$

where

$e$  is the base of natural logarithm

and

$${}^nC_r = \frac{n!}{(n-r)!r!}$$

where

$0! = 1$  and for  $n > 0$ ,  $n! = n(n-1)!$

## The End