

Expressions for 1

Author

Kirtivasan Ganesan,
AGM (A,E &C&IT),
RDCIS, SAIL,
Doranda, Ranchi, India – 834002.

Abstract

Expressions for 1 are very important. 1 means presence. In this paper I am submitting expressions for 1.

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Introduction

Humans since history enquired about presence. He wondered about absence and put a symbol 0 for it. Later as man advanced he used 1 as presence of a certain thing.

The expressions for 1 is therefore very important . The other numbers like 2,3,4,5 etc are the extension of the thought of 1.

In this paper I am submitting three expressions for 1. One of them is inspired from the Taylor series. And two of them are on continued fractions.

The first expression

$$1 = 1/2! + 2/3! + 3/4! + 4/5! + 5/6! + \dots$$

The above is inspired from the Taylor series. ^[2]

The second expression

$$1 = 3/(2 + 5/(4 + 7/(6 + 9/(8 + 11/(\dots))))))$$

The above is a continued fraction of 1. ^[1]

The third expression

$$1 = 1/(2 - 3/(4 - 5/(6 - 7/(8 - 9/(\dots))))))$$

The above is a continued fraction of 1. ^[1]

References

1. https://en.wikipedia.org/wiki/Continued_fraction
2. https://en.wikipedia.org/wiki/Taylor_series

