

VALIDITY OF PASCAL'S TRIANGLE CONJECTURE BY BINOMIAL THEOREM

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Abstract

The present paper establishes the Pascal's Triangle Conjecture as a theorem by applying the Binomial Theorem. The conjecture is:

“ **The sum of the numbers in the n -th row of the Pascal's Triangle pattern is equal to $2^{n-1} \quad \forall \quad n \in N.$** ” On analyzing the pattern of numbers in Pascal's Triangle it is found that each row in the triangle begins and ends with integer 1. Also, the sum of any two successive integers in a row is equal to the integer in the next row and is centred between the two integers.

Key Words : *Pascal's Triangle Conjecture, Binomial Theorem for any positive integral index.*

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