



Finite Sums Involving r -Stirling Numbers via Transformation Formulas

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Abstract

Transformation formulas are regarded as an important tool in mathematics, since they allow problems to be reformulated and various difficulties to be overcome. In this talk, attention is given to series transformation formulas involving the r -Stirling numbers of the first and second kind and also the r -Lah numbers, which are considered to play a central role in combinatorics. It is also shown how these transformation formulas lead to closed-form expressions for sums involving several well-known families of special numbers.

Keywords: r -Stirling numbers, r -Lah numbers, Transformation formulas, Combinatorics, Special numbers, Finite sums.
