

ON TRANSFORMATION FORMULAS OF ORDINARY HYPERGEOMETRIC SERIES

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Abstract: In this paper, certain transformation formulas have been established by using well-known Bailey's transform and some known summation formulas.

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1. Introduction, Notations and Definitions

Hypergeometric series form a particularly powerful class of series, as they appear in a great variety of different scientific contexts while at the same time allowing a rather simple definition. Popularized by the work of Gauss, hypergeometric series have been intensively studied since the 19th century and they are still subject of ongoing research [1, 9]. Nowadays, they are also well understood from an algorithmic point of view, and in this paper, we will see some of the most important algorithms for dealing with them. The hypergeometric function takes a prominent