ON CERTAIN IDENTITIES FOR ROGERS-RAMANUJAN CONTINUED FRACTION

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Abstract: In this paper, we establish relation between Rogers-Ramanujan continued fraction $R(q)$, $R(q^2)$, $R(q^n)$ and $R(q^{2n})$ for $n = 7, 13$ *and* 17.

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1. Introduction

Throughout the paper, we let $|q| < 1$ and for positive integer n, we use the standard notation

$$(a; q)_0 = 1,$$

$$(a; q)_n = \prod_{j=0}^{n-1} (1 - aq^j),$$