

## LEAPING CONVERGENTS OF HURWITZ CONTINUED FRACTIONS

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### Abstract

Let  $p_n/q_n = [a_0; a_1, \dots, a_n]$  be the  $n$ -th convergent of the continued fraction expansion of  $[a_0; a_1, a_2, \dots]$ . Leaping convergents are those of every  $r$ -th convergent  $p_{rn+i}/q_{rn+i}$  ( $n = 0, 1, 2, \dots$ ) for fixed integers  $r$  and  $i$  with  $r \geq 2$  and  $i = 0, 1, \dots, r - 1$ . The leaping convergents for the  $e$ -type Hurwitz continued fractions have been studied. In special, recurrence relations and explicit forms of such leaping convergents have been treated.

In this paper, we consider recurrence relations and explicit forms of the leaping convergents for some different types of Hurwitz continued fractions.

**Keywords:** Leaping convergents, Hurwitz continued fractions.

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