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PERIOD OF BALANCING NUMBERS MODULO PRODUCT OF CONSECUTIVE PELL AND PELL-LUCAS NUMBERS

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Abstract. The period of balancing numbers modulo m, denoted by $\pi(m)$, is the least positive integer t such that $\{B_t, B_{t+1}\} \equiv \{0, 1\} \pmod{m}$, where B_t denotes the t-th balancing number. In this article, the periods of balancing numbers modulo product of consecutive Pell and Pell-Lucas numbers are examined.

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Key words. Balancing numbers, Lucas-balancing numbers, Pell-Lucas numbers, periodicity.

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