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Title: On the Diophantine equation $L_n = \binom{x}{5}$

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In this paper we determine all integral solutions (n, x) of the Diophantine equation $L_n = \binom{x}{5}$, where L_n is the n -th Lucas number which is defined as follows, $L_0 = 2$, $L_1 = 1$ and $L_n = L_{n-1} + L_{n-2}$ for $n > 1$. We follow ideas described in [?], that is we combine Baker's method and the so-called Mordell–Weil sieve to show that the only positive solution is $(n, x) = (1, 5)$.

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