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Title: An algorithm determining cycles of polynomial mappings in integral domains

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In the first part of this paper we show how all normalized cycles could be found in a domain R , provided all nontrivial solutions in units of $u + v = 1$ and $u + v + w = 1$ are given. Then we give an effective method to find all normalized cycles in the ring of integers Z_K in any algebraic number field K . Finally, we deal with polynomial orbits.

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