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Hamid Kulosman* (h0kulo01@louisville.edu), Department of Mathematics, University of Louisville, Louisville, KY 40292. *Monomial sequences of linear type.*

Let R be a commutative ring. A sequence a_1, \dots, a_n of elements of R is a c-sequence if

$$[I_{i-1}I^k : a_i] \cap I^k = I_{i-1}I^{k-1}$$

for $i = 1, \dots, n$ and $k \geq 1$, where $I = (a_1, \dots, a_n)$, $I_i = (a_1, \dots, a_i)$ for $i = 0, 1, \dots, n$. These sequences are of interest since they generate ideals of linear type and every d-sequence is a c-sequence. We characterize monomial c-sequences of length 3 and give an example of a monomial sequence of length 3 which is a c-sequence in every order, but is not a d-sequence in any order. The proofs of all statements are combinatorial. (Received December 18, 2007)