

THE JACOBSTHAL FUNCTION IN INTEGER SEQUENCES

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Let m be a positive integer. The ordinary Jacobsthal function $j(m)$ is the least value such that in every set of $j(m)$ consecutive integers there exists an integer which is coprime to m . A possible generalization of $j(m)$ can be the following. Let $B = (B_n)_{n=0}^{\infty}$ be a sequence of arbitrary integers and let $j_B(m)$ be defined as the least number such that in every set of $j_B(m)$ consecutive terms of B one can find a term which is coprime to m . If $j_B(m)$ exists for every positive integer m , then we call B a Jacobsthal sequence. In this talk we investigate the Jacobsthal property in different families of integer sequences.