

Variants of Korselt's Criterion

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Abstract. Under sufficiently strong assumptions about the first term in an arithmetic progression, we prove that for any integer a , there are infinitely many $n \in \mathbb{N}$ such that for each prime factor $p|n$, we have $p - a|n - a$. This can be seen as a generalization of Carmichael numbers, which are integers n such that $p - 1|n - 1$ for every $p|n$.