

Title: An estimate for the length of an arithmetic progression the product of whose terms is almost square

Author(s): Shanta Laishram

Erdős conjectured that

$$n(n+d)\dots(n+(k-1)d) = y^2$$
 (1)

in positive integers $n, k \geq 3, d > 1, y$ with gcd(n, d) = 1, implies that k is bounded by an absolute constant. SHOREY and TIJDEMAN [16] showed that (1) implies that k is bounded by an effectively computable number depending only on $\omega(d)$, the number of distinct prime divisors of d. In this paper, an explicit bound for k in terms of $\omega(d)$ is presented.

Address:

Shanta Laishram School of Mathematics Tata Institute of Fundamental Research Homi Bhabha Road, Mumbai 400005 India *E-mail:* shanta@math.tifr.res.in