

1980 XI 15

MAGYAR TUDOMÁNYOS AKADÉMIA
MATEMATIKAI KUTATÓ INTÉZETE
BUDAPEST V. REÁLTANODA U. 13-15.
TELEFON: 182-878

Dear Dr Manstavicius,

Many thanks for your letter. Under separate cover I am sending you and Professor Kulikas some reprints. By the way József - Balá is now in Budapest, Elliott was here in July.

Denote by $V(n)$ the number of distinct prime factors of n - it easily follows from the prime number theorem that $\max_{1 \leq n \leq x} V(n) = (1 + o(1)) \frac{\log x}{\log \log x}$. I could never prove that

$$\max_{1 \leq n \leq x} (V(n) + V(n+1)) = (1 + o(1)) \frac{\log x}{\log \log x}.$$

Kind regards to you + your colleagues

P. Erdős