Title: On a generalization of a problem of Erdős and Graham

Author(s): Szabolcs Tengely and Nóra Varga

In this paper we provide bounds for the size of the solutions of the Diophantine equation $\frac{x(x+1)(x+2)(x+3)}{(x+a)(x+b)} = y^2$, where $a, b \in \mathbb{Z}$, $a \neq b$ are parameters. We also determine all integral solutions for $a, b \in \{-4, -3, -2, -1, 4, 5, 6, 7\}$.

Address:
Szabolcs Tengely
Mathematical Institute
University of Derecen
P.O.Box 12
4010 Debrecen
Hungary

Address:
Nóra Varga
Mathematical Institute
MTA-DE Research Group
"Equations, Functions and Curves"
Hungarian Academy of Sciences
and University of Debrecen
4010 Debrecen, P.O. Box 12
Hungary