

On Path Convex Ramsey Numbers

Chula J. Jayawardene,¹ Cecil C. Rousseau,²
and Heiko Harborth³

¹DEPARTMENT OF MATHEMATICS
UNIVERSITY OF COLOMBO
SRI LANKA
E-mail: c_jayawardene@yahoo.com

²DEPARTMENT OF MATHEMATICAL SCIENCES
THE UNIVERSITY OF MEMPHIS
MEMPHIS, TENNESSEE 38152
E-mail: ccrousse@memphis.edu

³DISKRETE MATHEMATIK
TECHNISCHE UNIVERSITÄT BRAUNSCHWEIG
D-38106 BRAUNSCHWEIG, GERMANY
E-mail: H.Harborth@tu-bs.de

Received February 23, 2016; Revised December 5, 2016

Published online in Wiley Online Library (wileyonlinelibrary.com).
DOI 10.1002/jgt.22126

Abstract: In this article, we will first find the path convex Ramsey numbers for two-colorings. Then using this, we will deduce some bounds for path convex Ramsey numbers for multicolorings. Next, we will find the convex Ramsey numbers for convex paths versus any graph containing a convex cycle, for convex paths versus stars, and for convex cycles versus stars. © 2017 Wiley Periodicals, Inc. *J. Graph Theory* 00: 1–9, 2017

Keywords: *graph theory; Ramsey theory*