

Accepted Manuscript

FEASIBLE PARTITION PROBLEM IN REVERSE CONVEX AND CONVEX MIXED-INTEGER PROGRAMMING

Wiesława T. Obuchowska

PII: S0377-2217(13)00864-3
DOI: <http://dx.doi.org/10.1016/j.ejor.2013.10.041>
Reference: EOR 11957

To appear in: *European Journal of Operational Research*

Received Date: 21 November 2011
Accepted Date: 15 October 2013

Please cite this article as: Obuchowska, W.T., FEASIBLE PARTITION PROBLEM IN REVERSE CONVEX AND CONVEX MIXED-INTEGER PROGRAMMING, *European Journal of Operational Research* (2013), doi: <http://dx.doi.org/10.1016/j.ejor.2013.10.041>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



**FEASIBLE PARTITION PROBLEM IN REVERSE CONVEX
AND CONVEX MIXED-INTEGER PROGRAMMING**

Wiesława T. Obuchowska

Department of Mathematics

East Carolina University

Greenville, NC 27858

e-mail: obuchowskaw@ecu.edu

Abstract:

In this paper we consider the consistent partition problem in reverse convex and convex mixed-integer programming. In particular we will show that for the considered classes of convex functions, both integer and relaxed systems can be partitioned into two disjoint subsystems, each of which is consistent and defines an unbounded region. The polynomial time algorithm to generate the partition will be proposed and the algorithm for a maximal partition will also be provided.

Keywords: Integer programming, infeasibility, reverse convex and convex constraints, feasible partition and maximal consistent partition problem.

Running title: Consistent Partition in Reverse Convex and Convex Integer Systems

Download English Version:

<https://daneshyari.com/en/article/6897586>

Download Persian Version:

<https://daneshyari.com/article/6897586>

[Daneshyari.com](https://daneshyari.com)