

# Hard equality constrained integer knapsacks: Erratum

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## Abstract

This is an erratum to our paper published in *Mathematics of Operations Research* **29**(3), 2004, 724–738.

In Theorem 1 of our paper, we claimed the following lower bound  $f(a_1, \dots, a_n)$  on the Frobenius number of the set of elements  $\{a_1, \dots, a_n\}$ :

$$f(\mathbf{p}, \mathbf{r}, M) = \frac{(M^2 p_j p_k + M(p_j r_k + p_k r_j) + r_j r_k) \left(1 - \frac{2}{M + (r_j/p_j)}\right)}{p_k r_j - p_j r_k} - 1.$$

Due to a calculation mistake in the final stages of the proof, the last term is not correct. The correct expression should be:

$$f(\mathbf{p}, \mathbf{r}, M) = \frac{(M^2 p_j p_k + M(p_j r_k + p_k r_j) + r_j r_k) \left(1 - \frac{2}{M + (r_j/p_j)}\right)}{p_k r_j - p_j r_k} - \left(M + \frac{r_j}{p_j}\right).$$

Also, in the proof of Claim 1, which is a part of proof of Theorem 1, there is an error in the reasoning used to prove the necessary conditions of that claim. The claim, however is still correct. A full corrected version of the paper is available from the home page of the first author:

<http://www.cwi.nl/~aardal>

We apologize to the readers for the inconvenience.