



# Integral part problems derived from a solution of an infimum problem

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*Abstract.* In this paper, we solve the following two integral part problems:

Find all  $r \in \mathbb{R}$  satisfying

$$r^2 = [r]([r] + 1), \quad \text{resp.} \quad r^2 \leq [r]([r] + 1).$$

These problems have been mainly motivated by a solution of an infimum problem of Z. Boros and Á. Száz.

*Key words and phrases:* Real and integral numbers, integral part equations and inequalities.

*ZDM Subject Classification:* Primary 39B22, 39B62; Secondary 97I10, 97I70.

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*(Received December, 2017)*

The work of the second author has been supported by the Hungarian Scientific Research Fund (OTKA) Grant K-111651.