

## Age factor in a math contest paper for 5th and 6th grade students

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The format of the Chernorizec Hrabar Math Tournament includes 5 divisions for students of two consecutive grades, e.g. 3rd and 4th or 5th and 6th grade students. Natural question is how appropriate is the common competition paper for any of two age strata. To clarify such issue we introduce the notion of age-factor index as the difference of the test-item difficulties calculated separately for any age strata, e.g.  $\Delta = T_5 - T_6$  where  $T_5$  and  $T_6$  stand for the test-item difficulty for the 5th and 6th grade students' variation row respectively. The average value of  $\Delta$  for the contest paper could be considered as a relative measure of reliability and uniformity of the contest paper for a particular target group. The study presents details about 2015 Chernorizec Hrabar contest paper for 5th and 6th graders and the application of the new concept in didactical analysis.