REVERSED VERSIONS OF ACZÉL–TYPE
INEQUALITY AND BELLMAN–TYPE INEQUALITY

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Abstract. In this note, using the method of Farid et al. (2010) [G. Farid, J. Pečarić, Atiq Ur Rehman, On Refinements of Aczél's, Popoviciu, Bellman's Inequalities and Related Results, J. Inequal. Appl. **2010** (2010), Article ID 579567], some reversed versions of Aczél-type inequality and Bellman-type inequality proposed by Farid, Pečarić and Ur Rehman are established. The obtained results are the refinements of reversed Aczél-Popoviciu inequality, Aczél-Bjelica inequality and Bellman's inequality.

Mathematics subject classification (2010): Primary 26D15; Secondary 26D10.
Keywords and phrases: Reversed version, Aczél-type inequality, Bellman-type inequality, Aczél-Popoviciu inequality, Aczél-Bjelica inequality.

REFERENCES

[1] J. ACZÉL, *Some general methods in the theory of functional equations in one variable, New applications of functional equations*, Uspehi. Mat. Nauk (N. S.) **11**, 3 (1956), 3–68 (in Russian).
[2] R. BELLMAN, *On an inequality concerning an indefinite form*, Amer. Math. Monthly **63** (1956), 108–109.
[3] M. BJELICA, *On inequalities for indefinite form*, Anal. Numer. Theor. Approx. **19**, 2 (1990), 105–109.
[4] J. L. DÍAZ-BARRERRO, M. GRAU-SÁNCHEZ, P. G. POPESCU, *Refinements of Aczél, Popoviciu and Bellman's inequalities*, Comput. Math. Appl. **56** (2008), 2356–2359.
[5] G. FARID, J. PEČARIĆ, ATIQ UR REHMAN, *On Refinements of Aczél's, Popoviciu, Bellman's Inequalities and Related Results*, J. Inequal. Appl. **2010** (2010), Article ID 579567, doi: 10.1155/2010/579567.
[6] T. POPOVICIU, *On an inequality*, Gaz. Mat. Fiz. Ser. A **11**, 64 (1959), 451–461 (in Romanian).
[7] J. TIAN, *Reversed version of a generalized Aczél's inequality and its application*, J. Inequal. Appl. **2012** (2012): 202.
[8] P. M. VASIĆ, J. E. PEČARIĆ, *On the Jensen inequality for monotone functions*, An. Univ. Timişoara Ser. Şt. Matematice **17**, 1 (1979), 95–104.
[9] P. M. VASIĆ, J. E. PEČARIĆ, *On Hölder and some related inequalities*, Mathematica Rev. D'Anal. Num. Th. L'Approx. **25** (1982), 95–103.

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