

CONVEX FUNCTIONS AND GENERALIZED BERNOULLI INEQUALITY

OLENA ANDRUSENKO, LIUDMYLA SHEVCHUK AND PAWEŁ WÓJCIK*

Abstract. In this article we give an other proof (and stronger theorem) of the conditional inequalities for convex functions. As a result, we present new inequalities in the spirit the well-known Bernoulli inequality.

Mathematics subject classification (2020): 26A51, 39B62, 39B05, 26D07.

Keywords and phrases: Convex function, inequalities, right derivatives, Bernoulli inequality.

REFERENCES

- [1] J. CHMIELIŃSKI, K. GRYSZKA, P. WÓJCIK, *Convex functions and approximate Birkhoff-James orthogonality*, Aequationes Math. **97**, (2023) 1011–1021.
- [2] O. STOLZ, *Grunzätze der Differential und Integralrechnung*, vol. **1**, Teubner, Leipzig, 1893.