Mathematical
Inequalities
& Applications
Volume 10, Number 1 (2007), 29–43

DECISION FUNCTIONS AND CHARACTERIZATION OF THEIR PROPERTIES

BORBÁLA FAZEKAS

Mathematics subject classification (2000): 26B25, 90B50, 91B06, 93E24, 26E60, 26E25.
Key words and phrases: decision function, convexity, least squares method, monotonicity, continuity, power means, Gini means, quasi-arithmetic means.

REFERENCES

[1] E. F. BECKENBACH, R. BELLMAN, *Inequalities*, Springer, Berlin, 1961.
[2] P. S. BULLEN, D. S. MITRINOVIĆ AND P. M. VASIĆ, *Means and Their Inequalities*, Reidel, Dordrecht, 1988.
[3] Z. DARÓCZY, *Über eine Klasse von Mittelwerten*, Publ. Math. Debrecen, **19**, (1972), 211–217 (1973).
[4] C. GINI, *Di una formula compressiva delle medie*, Metron, **13**, (1938), 3–22.
[5] G. H. HARDY, J. E. LITTLEWOOD AND G. PÓLYA, *Inequalities*, Cambridge University Press, Cambridge, 1934, (first edition), 1952 (second edition).
[6] O. HÖLDER, *Über einen Mittelwerthsatz*, Nachr. Ges. Wiss. Göttingen (1889), 38–47.
[7] D. S. MITRINOVIĆ, *Analytic Inequalities*, Springer, Berlin–Heidelberg–New York, 1970.
[8] ZS. PÁLES, *Characterization of quasideviation means*, Acta Math. Acad. Sci. Hungar., **40**, (3-4) (1982), 243–260.
[9] ZS. PÁLES, *How to make fair decisions?*, General Inequalities, 5 (Oberwolfach, 1986) (W. Walter, ed.), International Series of Numerical Mathematics, **80**, Birkhäuser, Basel, 1987, 439–450.
[10] ZS. PÁLES, *A Hahn-Banach theorem for separation of semigroups and its applications*, Aequationes Math., **37**, (2-3) (1989), 141–161.
[11] A. W. ROBERTS, D. E. VARBERG, *Convex Functions*, Pure and Applied Mathematics, **57**, Academic Press, New York–London, 1973.
[12] E. ZEIDLER, *Nonlinear Functional Analysis and its Applications I.*, Springer, New York—Berlin—Heidelberg, 1986.

Paper MIA-10-04