

## QUASI-ARITHMETIC MEANS AND SUBQUADRACITY

## SHOSHANA ABRAMOVICH

**Abstract.** The inequalities derived in this article for quasi-arithmetic means and power means are related to subquadratic and superquadratic functions.

Mathematics subject classification (2010): Primary 26D15, 47A63, 47A64; Secondary 26A51.Keywords and phrases: Subquadratic functions, convex functions, Jesen's inequality, quasi-arithmetic means, power means.

## REFERENCES

- [1] S. ABRAMOVICH, On superquadracity, J. Math. Ineq. 3, (2009), 329–239.
- [2] S. ABRAMOVICH, M. KLARIČIĆ BAKULA, M. MATIĆ, AND J. PEČARIĆ, A variant of Jensen-Steffensen's inequality and quasi-arithmetic means, J. Math. Anal. Appl. 307 (2005) 370–386.
- [3] S. ABRAMOVICH, J. PEČARIĆ, AND S. VAROŠANEC, Comparison theorems between several quasiarithmetic means, Math. Inequal. Appl. 7 (2004) 1–6.
- [4] R. Bibi, M. Bohner and J. Pečarić, Cauchy type means and exponential and logarithmic convexity for superquadratic functions on time scale, to appear, Ann. Func. Anal.
- [5] P. S. BULLEN, D. S. MITRINOVIĆ AND P. M. VASIĆ, Means and their inequalities, Reidel, Dordrecht 1988.
- [6] A. MCD. MERCER, A variant of Jensen's inequality, JIPAM, 4 (4), (2003), article 73.
- [7] J. A. OGUNTUASE AND L. E. PERSSON, Time scale Hardy type inequalities via superquadracity, to appear, Ann. Func. Anal.

