DERIVATIVES OF GENERALIZED MEANS

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Abstract. A generalized mean is a reflexive positive function of two positive variables. We study the partial derivatives of first and second order of a generalized mean. We also prove that a homogenous generalized mean is a mean on a limited interval. The results are useful in the researches related to the generalizations of the arithmetic-geometric mean.


Key words and phrases: generalized mean, arithmetic-geometric mean, mean on a limited interval.

REFERENCES