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EXTENDING MEANS TO SEVERAL VARIABLES

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Abstract. We begin the study of how to extend few variable means to several variable ones and how to shrink means of several variables to less variables. With the help of one of the techniques we show that it is enough to check an inequality between two quasi-arithmetic means in 2-variables and that simply implies the inequality in m-variables. The technique has some relation to Markov chains. This method can be applied to symmetrization and compounding means as well.

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