The Schur Geometrical Convexity of the Extended Mean Values

We prove that the extended mean values $E(r, s; x, y)$ are Schur geometrically convex (or concave, respectively) with respect to $(x, y) \in (0, \infty) \times (0, \infty)$ if and only if $s + r \geq 0$ (or $s + r \leq 0$, respectively).

**Keywords:** Extended mean value, Schur convex, Schur concave, Schur geometrically convex, Schur geometrically concave.

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