# MONOTONICITY OF RATIO BETWEEN THE GENERALIZED LOGARITHMIC MEANS 

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Abstract. Let $c>b>a>0$ be real numbers. Then the function $f(r)=\frac{L_{r}(a, b)}{L_{r}(a, c)}$ is strictly decreasing on $(-\infty, \infty)$, where $L_{r}(a, b)$ denotes the generalized (extended) logarithmic mean of two positive numbers $a$ and $b$.

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