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*Erratum*

# Erratum to "On Integral Inequalities of Hermite-Hadamard Type for *s*-Geometrically Convex Functions"

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In [1, Definition 1.9], the concept "$s$-geometrically convex function" was introduced.

Making use of [1, Lemma 2.1], Hölder's integral inequality, and other analytic techniques, some inequalities of Hermite-Hadamard type were established. However, there are some vital errors appeared in main results of the paper [1].

The aim of this paper is to correct these errors and we now start off to correct them.

*Correction to Theorem 3.1*. Let $f : I \subset \mathbb{R}_+ \to \mathbb{R}$ be a differentiable function on $I^\circ$ such that $f' \in L([a,b])$ for $0 < a < b < \infty$. If $|f'(x)|^q$ is $s$-geometrically convex and monotonically decreasing on $[a,b]$ for $q \geq 1$ and $s \in (0,1]$, then

$$\left|f\left(\frac{a+b}{2}\right) - \frac{1}{b-a}\int_a^b f(x)\,dx\right| \leq \frac{b-a}{4}\left(\frac{1}{2}\right)^{1-1/q} G_1(s,q;g_1(\alpha),g_2(\alpha)), \quad (1)$$

$$\left|\frac{f(a)+f(b)}{2} - \frac{1}{b-a}\int_a^b f(x)\,dx\right| \leq \frac{b-a}{4}\left(\frac{1}{2}\right)^{1-1/q} G_1(s,q;g_2(\alpha),g_1(\alpha)), \quad (2)$$

where

$$g_1(\alpha) = \begin{cases} \dfrac{1}{2}, & \alpha = 1, \\ \dfrac{\alpha\ln\alpha - \alpha + 1}{\ln^2\alpha}, & \alpha \neq 1, \end{cases}$$
$$g_2(\alpha) = \begin{cases} \dfrac{1}{2}, & \alpha = 1, \\ \dfrac{\alpha - \ln\alpha - 1}{\ln^2\alpha}, & \alpha \neq 1, \end{cases} \quad (3)$$

$$\alpha = \left|\frac{f'(b)}{f'(a)}\right|^{sq/2}, \quad (4)$$

$$G_1(s,q;g_1(\alpha),g_2(\alpha)) = \begin{cases} \left|f'(a)\right|^{s}[g_1(\alpha)]^{1/q} + \left|f'(a)f'(b)\right|^{s/2} \times [g_2(\alpha)]^{1/q}, & \left|f'(a)\right| \leq 1, \\ \left|f'(a)\right|[g_1(\alpha)]^{1/q} + \left|f'(a)\right|^{1-s/2} \times \left|f'(b)\right|^{s/2}[g_2(\alpha)]^{1/q}, & \left|f'(b)\right| \leq 1 \leq \left|f'(a)\right|, \\ \left|f'(a)\right|\left|f'(b)\right|^{1-s}[g_1(\alpha)]^{1/q} + \left|f'(a)f'(b)\right|^{1-s/2} \times [g_2(\alpha)]^{1/q}, & 1 \leq \left|f'(b)\right|. \end{cases} \quad (5)$$