Abstract. Let $I \subset R$ be an open interval, $f : I \to R$ a differentiable function with $f' : I \to R$ convex, and $a, b \in I$, $a < b$.

In this note, by using a Taylor-type result regarding left-hand derivative, we prove the following formula

$$\lim_{n\to\infty} n^2 \left[\frac{b-a}{n} \sum_{i=1}^{n} f\left(a + (2i-1) \cdot \frac{b-a}{2n} \right) - \int_a^b f(x)dx \right] = \frac{(b-a)^2 \left[f'(a) - f'(b) \right]}{24}$$

which is well-known for an other class of functions, see [1], Part II, Chap. 1, §2, namely for f twice differentiable with f'' integrable on $[a,b]$.

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