Review
on the article "A strengthening of a theorem of Marcinkiewicz" by
K. E. Tikhomirov

A famous Marcinkiewicz's states that

$$\int_a^b \frac{\delta^\lambda(y)}{|x-y|^{\lambda+1}}\, dt < \infty$$

for a. e. $X \in F$ where F is a closed subset of $[a, b]$, $\delta(y)$ is a distance from y to F and $\lambda > 0$. This theorem is closely related with a problem of intervals. This problem is open many years. The author has partly solved the problem. The obtained results are very interesting.

The first variant of this article contained some misprints, some proofs were not clear. I informed the author about these defects. He has corrected all misprints and errors and revised all text. Now I have not any remarks. I recommend to accept the revised version of this article.

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1