

## ON WIRTINGER'S INEQUALITY AND ITS ELEMENTARY PROOF

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*Abstract.* By an elementary method, we exactly determine the best possible constant and its attaining function which satisfy  $\|f\|_q \leq C_q \|f'\|_q$  ( $1 < q < \infty$ ) for certain class of continuously differentiable functions on the unit interval  $[0, 1]$ .

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