

SOLVE MATHEMATICAL OLYMPEAD PROBLEMS USING THE STOLZ'S THEOREM

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ABSTRACT

This thesis presents and solves the problems of the Mathematical Olympiad that can be solved using the Stolz-Cesàro theorem. The theorem is named after mathematicians. Otto Stolz and Ernesto Cesaro, who stated and proved it for the first time. This theorem can also be used not only to solve the problems of the Mathematical Olympiad among university students, but also to solve the problems of the Olympiad for school and high school students.

KEYWORDS: *Sequences, Limit, Stolz's Theorem, Hopital's Rule*

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