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## THE STABILITY OF SOLUTIONS OF THE GENERAL FIRST AND SECOND ORDER NONLINEAR AUTONOMOUS ORDINARY DIFFERENTIAL EQUATIONS

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## Abstract

By constructing suitable Lyapounov functionals, the sufficient conditions for the stability of the trivial solution  $\overline{x} = \overline{0}$  to the general first and second order nonlinear autonomous ordinary differential equations are established.

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Key Words: Stability, Trivial Solution, Liapounov functional, Positive definite, Negative definite, Negative Semi-definite.

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