

OSCILLATION BEHAVIOUR OF FIRST ORDER NEUTRAL DELAY DIFFERENTIAL EQUATIONS

(Gelagat Ayunan bagi Persamaan Pembezaan Tunda Neutral Peringkat Pertama)

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ABSTRACT

In this paper, we obtain some sufficient conditions for the oscillation of all solutions of first order neutral delay differential equations. The results attained improve and generalise some of existing results in the literature. Some examples are presented to illustrate our results.

Keywords: oscillation; nonoscillation; neutral delay differential equations; first order

ABSTRAK

Dalam makalah ini, diperoleh beberapa syarat cukup untuk ayunan bagi penyelesaian persamaan pembezaan tunda neutral peringkat pertama. Hasil yang diperoleh dapat menambah baik dan mengitlak beberapa keputusan yang sedia ada dalam susastera. Beberapa contoh dikemukakan bagi menjelaskan hasil tersebut.

Kata kunci: ayunan; bukan ayunan; persamaan pembezaan tunda neutral; peringkat pertama

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