

INTEGRAL INEQUALITIES
INVOLVING MAXIMA OF THE UNKNOWN FUNCTION

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Abstract. Some new nonlinear integral inequalities that involve the maximum of the unknown scalar function of one variable are solved. The considered inequalities are generalizations of the classical nonlinear integral inequality of Bihari. The importance of these integral inequalities is given by their wide applications in qualitative investigations of differential equations with “maxima” and it is illustrated by some direct applications.

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