SOME GENERALIZED NONLINEAR GAMIDOV TYPE INTEGRAL INEQUALITIES WITH MAXIMA IN TWO VARIABLES AND THEIR WEAKLY SINGULAR ANALOGUES

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Abstract. In this paper, some new nonlinear Gronwall-Bellman-Gamidov type integral inequalities with maxima in two variables and their weakly singular analogues are discussed. By using analysis techniques, such as change of variable, amplification method, differential and integration, inverse function, we estimated the upper bounds of the unknown functions. For illustrating the validity of the inequalities established, some examples are given to study the boundedness and uniqueness of solutions of a certain Gamidov type weakly singular integral equations.


Keywords and phrases: Gamidov type, integral inequality, integral equations, maxima, weakly singular.

REFERENCES


