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On New Classes of Stancu-Kantorovich-Type Operators

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Abstract:

The present paper introduces a new classes of Stancu-Kantorovich operators constructed in the King sense. For these classes of operators we establish some convergence results, error estimations theorems and graphical properties of approximation for the classes considered, namely, operators that preserve the test functions $e_0(x) = 1$ and $e_1(x) = x$, $e_0(x) = 1$ and $e_2(x) = x^2$, as well as $e_1(x) = x$ and $e_2(x) = x^2$. The class of operators that preserve the test functions $e_1(x) = x$ and $e_2(x) = x^2$ is a genuine generalization of the class introduced by Indrea et al. in their paper "A New Class of Kantorovich-Type Operators", published in Constr. Math. Anal.

References

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