

## FEJER INEQUALITY FOR $s$ -CONVEX FUNCTIONS IN THE FOURTH SENSE

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**Abstract.** In this paper, Fejér inequality for  $s$ -convex functions in the fourth sense is established. Some integral inequalities related to Fejér inequalities are presented through the functions whose first derivative is  $s$ -convex in the fourth sense. Also some application examples of these inequalities are presented. These applications of Fejér inequality and other obtained integrals result in the bound functions for Gauss error function, incomplete gamma function and Fresnel integrals.

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