

Jensen-type inequalities for m -convex functions and applications

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Abstract: Integral inequalities are a fundamental tool in mathematics and have countless applications in various fields. In particular, Jensen inequality, one of the most famous inequalities, plays a main role in the study of the existence and uniqueness of initial and boundary value problems for differential equations. In this work we prove some new Jensen-type inequalities for m -convex functions, and apply them to generalized Riemann-Liouville-type integral operators. Furthermore, as a remarkable consequence, some new inequalities for convex functions are obtained.

References

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