

**CERTAIN CLASSES AND INEQUALITIES INVOLVING
FRACTIONAL CALCULUS
AND MULTIVALENT FUNCTIONS**

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Abstract

In this paper we introduce two new subclasses $\mathcal{V}_\delta(p; \mu)$ and $\mathcal{W}_\delta(p; \mu)$ of analytic and p -valent functions, defined by using the fractional calculus operators (fractional derivatives). We obtain a sufficient condition for a function to belong to each of these subclasses and investigate the characteristics of functions in these subclasses. Geometric properties of multivalent functions (p -valently close-to-convex, p -valently starlike and p -valently convex functions) are also considered.

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