

Jack's lemma for certain subclasses of analytic functions defined by a new fractional linear operator

ABSTRACT

The theory of functional operator has been employed in several areas of mathematics, especially in the geometric function theory in the open unit disk. By utilizing the Moment-Generating function, we define a new fractional linear operator in the open unit disk. We discuss some geometric properties of this operator on some subclasses by applying the concept Jack's lemma.

Keyword: Analytic functions; Convex function; Hadamard product; Jack's lemma; Linear operator; Moment-Generating function; Starlike function