Riemann-Liouville Fractional Operators of Bicomplex Order and Its Properties.

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Abstract

In this paper, we construct the Riemann-Liouville fractional integral and differential operator of bicomplex order and illustrate some examples to calculate the fractional integration and differentiation of bicomplex order of some elementary functions. Also, we discuss some properties of these operators by proving analogues of the Leibniz and chain rules for these operators.

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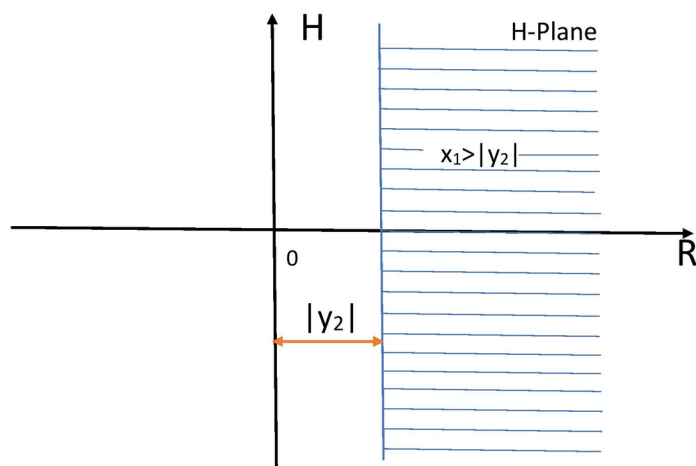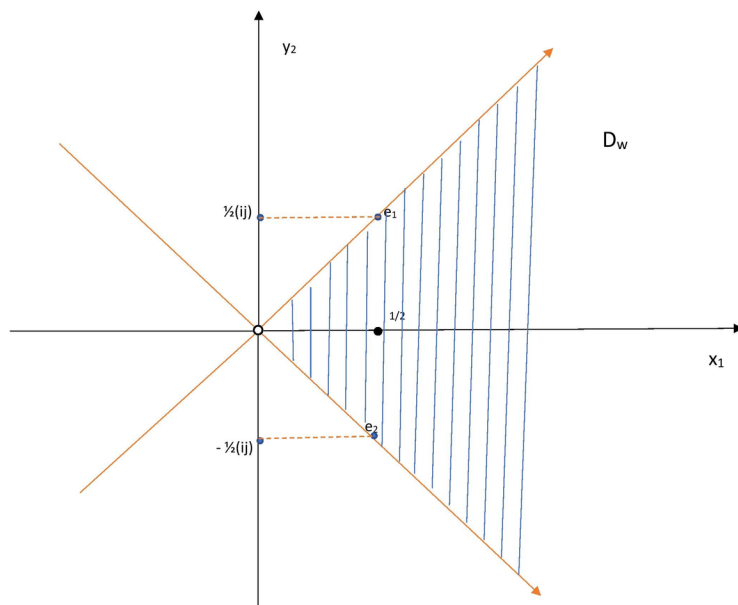

Figure : 1

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Figure: 2