Arithmetic properties of complex Fibonacci numbers and Fibonacci quaternions[*]

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Abstract. In this paper, we investigate certain arithmetic properties of complex Fibonacci numbers and Fibonacci quaternions. More specifically, we look at the divisibility properties of complex Fibonacci numbers and Fibonacci quaternions. Our results make use of some well-known Fibonacci identities. Since quaternions are non- commutative algebra, extra care has been taken to investigate the various divisibility properties of the Fibonacci quaternions.

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