



Rings & Wings

`math.uccs.edu/algebra-seminar`

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Title: Egyptian Fractions in Rings with Zero Divisors

Abstract: The ancient Egyptians developed the notation of *Egyptian fractions*, sums of distinct rational numbers of the form $\frac{1}{n}$ for nonzero integers n . Fibonacci proved that every rational number can be expressed as an Egyptian fraction. At the March 2, 2023 UCCS Mathematics Colloquium, Greg Oman presented findings that extend the idea of Egyptian fractions when working in commutative integral domains. Inspired by that presentation, this talk will discuss results of Egyptian fractions when in commutative rings with zero divisors, as well as give some more historical context to the use of Egyptian fractions.