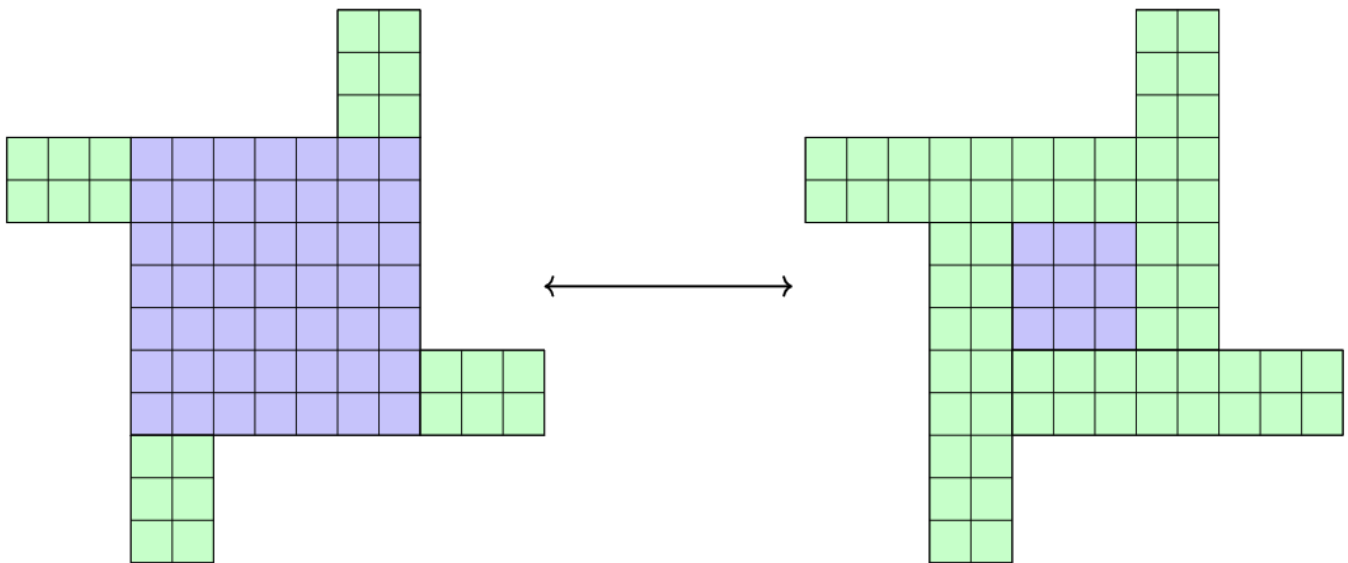


Graduate Mathematics Seminar

Sum of Squares Residues Formulas

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Abstract: Think of a prime number $p=4n+1$. Square all numbers (modulus p) from 1 to $p-1$ and add them up. For instance, for $p=5$, the squares mod 5 are 1, 4, 9=4, 16=1, the sum is 10. We call this “the sum of squares residues”. This sum is quite known. Now try the same but with $p=4n-1$. We will study different formulas to compute these sums of residues. This talk is extremely easy to follow, even by sleeping and you can derive the formulas on your own in probably 7 minutes. Please bring your own formulas for both $p=4n+1$ and $4n-1$ for a price. Price for each formula is \$5 through Venmo to the first person in the talk, make sure to share your screen with your own computations. One condition, formula must be very easy to understand, only students please.

When: Monday, November 16, 2020, 6:00 – 7:00 pm

Where: CSUCI, Zoom

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