N7 Quadratic Tivenan

Stephen Tivenan

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1 Discussion

A pattern that I notice for the total amount of quadratic residues, except for the number two. The total number of quadratic residues is half of plus one of the prime number. For example three has two elements (3+1/2=2) that are quadratic residues 0 and 1 and 5 has three quadratic residues(5+1/2=3), 0,1, and 4. The other pattern that I notice for every quadratic residue that contain a p-1 for a given prime number. That the difference between consecutive the prime numbers always divides by four except 5-2. For example: 13-5=8, 17-13=4, 29-17=12 and so on. In fact it seems that the pattern between the differences of the prime numbers that contain a quadratic residues that is equal to p-1 is 8,4,12. If we were to divide these numbers by four we would find the integers: 1,2,3.