Math 201 - Discrete Mathematics and the Theory of Numbers

Fall Semester 2019

Section 002: TTh 11:30 am–12:45 pm (236 Dumbach Hall)

the prime spiral (aka the Ulam spiral)

Notice that the blue numbers (all primes but for 1) tend to line up along diagonal lines. In a passage from his 1956 novel *The City and the Stars*, author Arthur C. Clarke describes the prime spiral seven years before Ulam discovered it. Clarke did not notice the pattern revealed by the prime spiral because he never actually experimented.

- Ground Rules
- Piazza
- Homework & Reading Assignments
- Questions for Class Discussion
- Useful References
- History of Number Theory

On the other hand, it is impossible for a cube to be written as a sum of two cubes or a fourth power to be written as a sum of
two fourth powers or, in general for any number which is a power greater than the second to be written as a sum of two like powers. For this I have discovered a truly wonderful proof, but the margin is too small to contain it.

– P. Fermat