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**
- **Quiz Solutions (qz 1, qz 2 )**
- **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