

## Perfect and Other Numbers

The goal of the presentation is to discuss numbers with special properties. Specifically perfect numbers as well as others. For more information on perfect numbers look at

- [http://en.wikipedia.org/wiki/Perfect\\_number](http://en.wikipedia.org/wiki/Perfect_number)

Your presentation should include

- A discussion of the perfect numbers. Including Euclid's and Euler's results.
- The connection to Mersenne Primes (are there an infinite number of perfect numbers?)
- Properties of odd perfect number (if they exist)
- A discussion of at least one of
  - Abundant Numbers
  - Multiply Perfect Numbers
  - Weird Numbers
  - Sociable Numbers

You should also feel free to expand on the above in any directions you would like (so long as they are related to the topic). If you have any questions regarding the presentation feel free to e-mail your TA or Dr. Ackerman