1. Monday choice: Before coming to class Monday February 18, each group should develop a preference or a plan for their group presentation. Presentations will not typically focus on a particular algorithm or method, but rather on comparing different methods or techniques. Key presentations will include

(a) Speed testing:
   - Utilize C++ template classes from Computer Lab II.
   - Create timing class, evaluating at $10^6$ random points, timing only evaluations
   - Explore compilation options for optimizing performance

(b) Error testing:
   - Utilize C++ template classes from Computer Lab II.
   - Graphical error estimate
   - Systematic searches for maximum error (for polynomial and rational function fits)
   - Contemplate the challenge of finding maximum errors for splines and trapezoidal approximations.
   - For methods that feasibly can produce more-than-machine accuracy, look to the High Precision group to provide appropriate routines

(c) Machine performance
   - Find machine timing information for adds, multiplies, divides, integer, mod, other operations
   - Note complexities with more than one FPU, operation per cycle
   - Note complexities involving cache
   - Evaluate a few of the fast-sine method: are they reaching near-ideal performance?

(d) High Precision group (for methods at greater than machine precision)
   - Generate classes for high-precision arithmetic (or use NR)
   - Generate template high-precision-sine function for users
   - Distribute both prototype and arithmetic classes

(e) Pareto efficiency
   - Plotting accuracy versus time for the various methods
   - Find Pareto frontier
2. **Before computer lab Friday March 1:** Have the results ready for your presentation. Be prepared to interact with the other groups, providing information about your sine implementation and also coordinating with those giving related presentations to avoid overlap. By the end of the lab period, you should have a rough draft of your presentations, due the following Wednesday and Friday.