You may do these problems in any order you wish (feel free to go back and forth between them). Please type your answers into the Skype instant message – be sure to indicate which question is being answered. Partial credit can be granted for each question.

No questions during the exam are allowed – all necessary instructions are outlined here. You will have 30 minutes for the exam.

Basic Instructions (additional instructions will be in each exercise's file):

- **Problems 1, 2, and 3 (40%):** These contain code 'snippets'. You need to find issues with the code. These can be logic issues, syntax issues, memory issues, or common-sense issues. If you are unsure if something is really an issue, type it in anyways – there is no penalty for answering extra or non-issues; points are docked only for failing to find the actual issues. Use of Visual Studio or other compiler is **NOT** allowed here. Pen & paper are allowed.
    - 1.jpg: This is a self-contained function. Do not worry that there is no main(). Any issues you find will be in this actual function.
    - 2.jpg: This is a flawed assignment operator function from a typical Array class. Any issues you find will be inside this function. Assume that every other part of this Array class (not shown) is coded correctly.
    - 3.jpg: This contains a code sampling from a typical NumericArray derived class (from Array). Any issues you find will be in the given code; assume that every other part of the NumericArray class (not shown) is coded correctly.

- **Problem 4 (10%):** This contains a function that outputs a value. Assuming this function is called from main(), what will the actual output be? Use of Visual Studio or other compiler is **NOT** allowed here. Pen & paper are allowed.

- **5 – Level9.txt (50%):** You should open your Level 9 code in Visual Studio (or other compiler).
    - **Monte Carlo:** You may use any NSIM and time-step# (smaller numbers recommended due to the time constraint). Be sure to provide the used NSIM and time-step# with your final answer.
    - **FDM:** If you cannot get a reasonable output here, don't worry -- simply type that into Skype as your answer.