1. (10 points) Using one character (or digit) per slot in the grid below, specify the precise output of the program above (dealing with dynamic arrays).

2. (15 points) Fill in the missing code in the class below (dealing with two-dimensional arrays) to satisfy the commented function specifications.

3. (15 points) Given a definition of a specific matrix operation and the definition for a class that involves matrices, write the complete implementation of the member function that would implement that matrix operation for the given class.

4. (10 points) Using one character (or digit) per slot in the grid below, specify the precise output of the program above (dealing with output formatting).

5. (20 points) Recall that Newton’s Method provided a means for numerically approximating a root of a function $f(x)$. Write the C++ code to implement a specific function that would be used to facilitate the determination of a root of a function in a particular manner.

6. (20 points) Recall the statistical functions that we discussed in class for calculating the mean, standard deviation, and kurtosis of a list of values. Write the C++ code to implement a specific additional statistical function.

7. (10 points) The function listed below is an incorrect implementation of C++ code that could be used to approximate a derivative or a definite integral, with each of the highlighted lines containing one error. Correct the errors on each line (by rewriting the line in corrected form) so that your final code will correctly implement the desired function.