**Applied Maths & Graphics Coursework Test Specification**

**Test Specification for Part A**

Part 1

To demonstrate part 1 of the coursework, run the program “MyCode.cpp”. Four different trapeziums should display. Use the arrow keys to move the four trapeziums around the screen.

Part 2 + 3 + 5

To demonstrate part 2, 3 and 5 of the coursework, run the program “MyCode.cpp”. Then press the key “Q”, this will bring up a pop up window called “Set parameters”. On this window for the file name, please type “poly.dat”. Then for the Distance values, type “-300” for X, “0” for Y, and “1500” for Z. A red trapezium should display. Use the arrow keys to move the trapezium around the screen. To rotate the trapezium, use the keys “I”, “O” and “P”. I will rotate the shape in the x-coordinates, O rotates the shape in the y-coordinates, and P rotates the shape in the z-coordinates.

Part 6

To demonstrate part 6 of the coursework, run the program “MyCode.cpp”. Then press the key “Q”, this will bring up a pop up window called “Set parameters”. On this window for the file name, please type “box.dat”. Then for the distance values, type “0” for X, “0” for Y, and “1500” for Z. For angle values, please type “0” for X, “0” for Y, and “1” for Z. A grey cube should display. Use the arrow keys to move the cube around the screen. To rotate the cube, use the keys “I”, “O” and “P”. I will rotate the shape in the x-coordinates, O rotates the shape in the y-coordinates, and P rotates the shape in the z-coordinates. (Beware, the program tends to crash if the cube goes above or below window space).

**Test Specification for Part C**

Part 1

To demonstrate part 1 of the coursework, run the program “MyCode.cpp”. Then press the key “Q”, this will bring up a pop up window called “Set parameters”. On this window for the file name, please type “box.dat”. Then for the distance values, type “0” for X, “0” for Y, and “1500” for Z. For angle values, please type “0” for X, “0” for Y, and “1” for Z. Two multi-coloured cubes should display. The cubes should also demonstrate z-buffering when a closer shape is covering a further away shape. Use the arrow keys to move the cubes around the screen. To rotate the cubes, use the keys “I”, “O” and “P”. I will rotate the shape in the x-coordinates, O rotates the shape in the y-coordinates, and P rotates the shape in the z-coordinates. (Beware, the program tends to crash if the cube goes above or below window space).