There are 5 problems below. To receive full credit, you must solve four of them. Email me each solution or otherwise make them available to me as you did passing off the last few assignments. Clearly indicate which problem you solved in each email. You can send all the email solutions at the end, but if you send them earlier I will do my best to grade them earlier and let you know if there is a problem, though I can’t guarantee that.

You must stop modifying code promptly at 3:00pm. After that, you have until 3:10 to organize your files, zip them up, and get them to me at stander@dixie.edu.

Open book, notes, computer, Internet, and calculator.
No Human help, including humans through the Internet.

Read through all the problems and do the easier ones first!

1. In your Texture assignment, you are currently drawing one texture to take a whole polygon and a second texture to repeat over a whole polygon. Replace the second texture with the first, so there is only one picture. However, where you were drawing the second texture map, zoom in on the first texture map, so the MIDDLE THIRD of the picture fills the whole quad. So in the end, I want to see some walls with a full picture and other walls with the same picture, but only the middle third of it, in both directions.

2. Change the whole Bezier assignment so it supports degree 4 curves instead of 3. The formulas is:
   \[ p = p_0(1-t)^4 + 4p_1(1-t)^3t + 6p_2(1-t)^2t^2 + 4p_3(1-t)t^3 + p_4t^4 \]

3. Make the chess program do the following animation:
   A. View the board from the side, with black to the left.
   B. From time 1 to 3, have the white king’s pawn move forward two squares.
   C. From time 4 to 6, have the same pawn rotate forward to the ground.

4. Enhance the Terrain Generator program as follows, when viewing from Rat’s view:
   A. Striking the ‘U’ key over and over slowly tilts the viewing angle Upward towards sky. The position of the rat is not affected by this.
   B. Striking the ‘D’ key over and over slowly tilts the view back Down towards the ground.

5. Start by drawing a 6 sided polygon, where each side has equal length. When the user strikes keys 3-9, redraw the polygon to have that number of sides, where each side has equal length.
   HINT: You may want to use my DrawCircle code as a starting point.