

HW4 Reflection

For the entire homework set, make sure to also include:

- a reflection on the assignment and your solutions. Reflections may include
 - discussion of how routine or challenging the assignment was,
 - approximation of time spent on the assignment or on individual exercises,
 - details about particular difficulties or false starts,
 - explanations of why solutions are incomplete or incorrect, etc.
- a self-assessment (C/R/M) for the entire assignment.

This assignment was a nice break from rigor, considering we simply had to draw out some visualizations for simplicial complexes. For my creative element, I wrote another poem because that's my favorite type of writing. I will shortly explain my submission here, because I'm not sure whether it is clear or not:

1 Beside a tree, beneath the moon, was a freshwater lake;
2 A wee duck there loved to croon;
3 And crooning was no mistake;
4 Thus the drake would often sing with glee;
5 "The lake;
6 The moon;
7 The tree!"

This represents a simplicial complex because each line contains a certain number of words which rhyme with each other. The tree rhyming conventions are words that rhyme with lake, moon and tree; in the first line, we have all three rhymes. In the following three lines, there are only 2 of each (representing AB, BC, CA in the common letter-expression of a complex); and in the last three lines, there is only 1 of each. For my drawings, I had a lot of fun simply thinking about how each of the complexes should be represented. In hindsight, I could have labeled the edges, however I believe that it actually makes the representation more interesting; it shows that the properties of a letter representation are directly proportional to the geometric properties of each shape, that is, whether edges are connected by faces or whether vertices are connected by lines.