

Test 2 Reflection

This test covered various objectives in this heat transfer course such as : defining different modes of heat transfer and solve force convection problems using different experimental correlations. The mistakes I made during the test were mostly through poor algebraic skills and simplifying the equation. I integrated correctly and used differential equations but when simplifying I made errors that resulted in the wrong temperature profile equation. This part was very crucial because when putting the equation for T into COMOL for the second part of the test it needs to be correctly written into the program to solve for temperatures. If I simplified the T equation correctly in the first part of the test I could of plugged it in correctly in COMSOL. If I were to do the test again I would practice more COMSOL problems, that way I could have obtained the right values.

If I were to grade my test I would give myself a B-. I have learned that COMSOL is a powerful program to use to solve heat transfer problems as well as other engineering disciplines. Using it in this class will be a good for the future in case we want to find the heat transfer along any object that is in the shape of a plane wall, cylinder, or a sphere. Heat transfer is a crucial subject for the mechanical engineering discipline and is also a section in the fundamentals of engineering exam. I am currently taking the ENGN401: FE review class which has practice problems in the heat transfer section. This class helps me solve those problems which will help me in the future when I take the FE. I feel like I was most successful in the integral and differentiating part of the test but I made an error in algebraic simplifying. The course I believe will be intersecting in my field especially in any job where they need to know the heat transfer between objects. If the problem is conduction, convection, or radiant heat transfer related. Also using COMSOL would help in any future engineering projects.