

Test 1 Reflections

- 1) This test helped me demonstrate and work towards course objective “Compute pressure and the forces (magnitude, location, and direction) associate with it in a stagnant fluid” by using Bernoulli’s equation to compute pressure in a tank then using that pressure to find the magnitude and location of the mercury in the manometer.
- 2) I did not compute the total energy loss correctly I did not factor in elbows or valves in the pipe. I made this mistake because I assumed that the energy loss for the pipe would be the same throughout, so I just took the total length and calculated from there. If I could take the test again, I would tell myself to slow down and take my time to think about the whole system and don’t forget to take the air into account as a fluid
- 3) According to the rubric I believe my test should be a 69 because my calculations may be correct, but I get the wrong answer in problem 1 I forgot to solve for pressure in the elbow, did not use the gamma equation correctly to find the manometer height and did not get the correct results. For question 2 I did not get the correct results however I believe I did use the equation correctly. And for the third question I’m not sure I got the correct results however I do believe I set up the problem correctly.
- 4) A) during the test I had a lot of issues setting up the excel file I had no clue where to start and I could not find any examples on blackboard
B) I tackled the test one question at a time I was stumped on the first question when I was getting a very high number then I reached out to Professor Ayala, and he helped me get back on track.
C) I learned how to create a plot in excel
D) I believe engineers use excel a lot in the workplace, from creating data tables and plugging them into formulas. The using that data on a chart to show how it relates
E) I believe I will be using excel frequently in the workplace. I will also use my skills with finding pressure if I were to get a job relating to fluids.
F) Yes, the use of excel is very important for my career a lot of employers look for this as one of the main programs on your resume.
G) I would use this skill If I were to get a job where my boss asked me to plot out a data set and use a chart to present the information to a client.
H) I have not applied the concepts learned in this test yet, but I anticipate using them frequently.
I) I feel the most successful area of my test was the use of Bernoulli’s equation even though it took me a few attempts once I finally understood I feel as though my use of the equations was very effective.
J) I see this course impacting my professional career in a good way, by being challenged to think outside the box and being made to figure out my problems will help me build problem solving skills and make my brain work harder.
K) I spent roughly 10 hours on this test, during the next test I should have a better understanding of the requirements of the test and be able to organize my time more efficiently.