1) How and why the test demonstrates your work toward one, or more, of the course learning objectives. Be specific on the course objectives you mention.

After taking the last test, questions 1 and 2 included multiple parts of the course learning objectives. Firstly, course objective number 5, Bernoulli's Equation, we had to utilize to solve for the total flow rate after some rearranging and iteration. Secondly, course objective 6, friction losses, the problem included pipe losses so I needed to use that concept and include it into Bernoulli's Equation.

2) How does my test compare to the solution? What advice would I give to myself?

After comparing, it is similar when it comes to the formula and iteration processes, however the only things that were missing were the conservation of mass equation and the correct results. Advice I would give myself is to ask more questions on the concept, because I struggled on how to properly form the equation and apply the missing conservation of mass equation.

3) What should my grade be? Strengths and weaknesses.

From basing off from the grading rubric, my grade on Test 3 should be 69.4%. My strengths in this test was coming up with the initial formulas and the iteration process. Weaknesses, was making the Qtotal formula and proving number 2.

## 4) Discuss the following

- a) What issues did I encounter?
  - Some issues I encountered were how to start each problem and redoing my first problem formula to answer the 2nd question.
- b) Steps taken to solve the problems? Changes?
  - Look at what the question was asking carefully and utilizing the Pretest email and asking questions via text
- c) New concepts learned?
  - Better use of the excel sheet to iterate instead of doing constant calculations.
- d) Where do engineers use these concepts?
  - SInce this test dealt with pipes in a system, this can be used in machines that deal with the transportation of fluids like gasoline or water through complex piping systems that involve valves.

- e) Where do I think I will be using everything I learned?
  - After graduation, I will be commissioning in the Navy. I feel these concepts can be used on ships or submarines because I will be also dealing with filling the ship with fuel if I get service selected in the Engineer Corps.
- f) What I learned is important to my professional career?
  - Yes (as stated before), if I get selected to be stationed in a ship or submarine, I will have an idea on how to operate some mechanical equipment.
- g) How, when, where, and why I might use this skill in the future?
  - Stated in e and f.
- h) Have I applied what I learned in other courses?
  - Fluids Lab
- i) What areas were I successful, or improved the most?
  - The area I felt most successful in was making the initial formula and the iteration process.
- j) How does this course content intersect with my career?
  - This will intersect with the Navy and engineering job opportunities dealing with fluids
- k) How much time was spent on the test?
  - I spent from beginning to the end. I utilized the first day to submit the pre test work so I can get all my other course load work done so I can use the full 3 days to work on the exam. Basically the same thing I did for the other tests and there is nothing I would do differently because this schedule worked the best when it came to trying to get the best grade.