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 decide to mention.
    a. One course objective is to know how to compute fluid pressures, which this test addresses. Forces of stagnant fluids and in pipes, object buoyancy and stability, Bernoulli's equation, friction losses, open channel flow, cavitation and water hammer phenomena were also involved with this test. It was a good summary of just about everything I have learned in this class so far.
2. How your test compares against the available solution. State the mistakes you made and what you will do next time to avoid making same mistakes. Please point out exactly where you made the mistake, say why you made the mistake, and how you should have done it. If you were taking this test again, what advice would you give yourself to ensure that you had a successful test?
    a. My test answers were a little different than the solutions from the get-go. In some instances, my answers were just completely wrong. I think that the solution given for part a is not completely correct because of the conversion from 300 feet to meters. To avoid mistakes in the future (because I know I made some), I will make more time for myself (even though used most of the ample time given me to work on this test) to work on this test. Writing out the problem and solving it on a whiteboard enables me to better see the big picture and my mistakes so that I can correct them with minimal frustration and save paper at the same time.
3. What your grade should be. Base it on the writing rubric provided in the test and the correctness of your solution. What are the strengths and weaknesses of your test?
    a. I calculated that I got 53 out of 90 points on this test.
    b. One clear weakness is I wrote very small and tried to cram lots of info on a single sheet of paper. This resulted in a cluttered test format and could have been more spread-out and neater. One strength that my test had was that it was detailed. Lots of notes, even during the test taking, was a good way to track progress and correct the mistakes I made.
4. Discuss the following:
    a. What issues did you encounter in completing the test? How did you troubleshoot them?
        i. The issues I encountered were minimal. Some were the clarity of the test questions (I was grateful to the professor for letting us ask any clarifying questions), thinking through the problems in a step-by-step manner, and where to begin solving the test. To solve these, I asked the professor questions, I read the whole test as coherently as I could with the new information given from the professor, and I plotted a step-by-step plan for solving the test.
    b. What steps did you take to complete the whole test? Would you change something?
        i. Each test question built off the previous one, so I worked backwards. I tried to figure out what was needed in the final question, then I moved backwards to the first question. Then I was able to begin solving.
    c. What new concepts have you learned?
        i. This test took a lot of forethought and planning. More than what I am used to. It required me to be systematic and to plan so that I had enough time to do as well as possible on the test while also doing other school assignments. I

learned/practiced better scheduling for time and better methodical test solving skills.

d. Where you think engineers use those concepts (provide specific examples)?
    i. Any large or small project requires planning. A team that wants to build a new football stadium or even just a water distribution system for an automobile assembly plant needs to first start out with what their goal is, and then ask how to achieve that goal most efficiently.
e. Where do you think you will be using everything you learned?
    i. In whatever job I find. All jobs and projects are different, but the planning method I practiced in this test was a good one and I hope to make it better as I move forward in my education and professional careers.
f. Do you think what you learn is important for your professional career?
    i. Absolutely! Knowing how to solve problems and plan for projects is an incredibly useful skill. Every process and method of thinking can be refined and expanded. I am not sure that I will be using every small bit of knowledge that I learned in this class, but one never knows what the future holds. Saving my class work and textbook is a good idea as I am sure that one day, they will make excellent sources of career-applicable knowledge.
g. How, when, where and why you might use this information or skill in the future?
    i. I might use this knowledge for an employer who want to set up a water distribution system to a neighborhood, or I may want it to help me on the 100-acre farm that I might one day purchase to help make my life easier. I might use it if I go with a team from Engineers Without Borders to a third-world country to help set up water pumps so that they can have access to clean water. The possibilities are limitless.
h. Have you been able to apply concepts you have learned in the course to what you do at work or in other courses?
    i. I was able to apply what I learned about buoyancy and stability to an essay that I needed to write in another course about those two topics. It was very helpful, and I breezed through writing the research paper.
i. What areas did you feel you were most successful, or improved the most?
    i. I was able to think critically to begin with. I believe I asked good questions, and then attempted to answer those questions in a systematic manner. I want to improve in this same area, though. I can always get better at apply not only the subject matter I have learned, but also what questions to ask and how to go about answering them.
j. How do you see this course's content intersecting with your field or career?
    i. In lots of ways. The mechanics of fluids is a very interesting subject and I quite like learning about it. I am currently a full-time student, but when I get a job it may have something to do with fluids.
k. How much time did you spend on the test? How was the time organized? What would you do differently? Why?
    i. The test was made available on the evening after class (Wednesday), and was due at midnight the following Monday. My time was divvied up among some

other class assignments, but most of that time was spent on this test because of its magnitude. I would have liked to have structured my time a little bit better, but since it was the start of spring break, it was difficult to sit still for four hours at a time working on this test. I think what I would do differently would be to make my studying times in bursts of two hours or so with half-hour breaks in between to do exercise or something like that.

5. In the reflection, you should describe the test using facts and feelings providing relevant details. You should identify strengths and weakness of the test and connect the test with experience. Finally, you should also clearly explain the quality of the artifact and give insight and state reason for judgment
    a. I did not get even half of the answers correct on this test, but I will not let that discourage me from learning from my mistakes. I also think that having a physical textbook to make notes in would be a wonderfully helpful thing. I do not think that I scored too high on this test, but I am confident that my methods for solving the questions on this test were solid.