EPortfolio test 3

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MET 330

1) Q) “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) I believe that I, and my partner were most effective at the course objective about Bernoulli’s equation and implementing it to solve systems, during this test. The objective “ Apply and integrate the principles of conservation of energy (Bernoulli’s equation) and mass to various fluid flow systems, solving complex flow-related problems.” Was specifically met.

2) Q) “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) I actually believe I did the best I could do on this test. I found that time management was a key factor and a reflection that I made on the last test and found that the only reason I was able to answer all the questions wass because I started the day the test opened.

3) Q) 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?

<u>“Pipeline redesign</u>

i. Recalculate the new pump power including minor losses 1/8 out of 1/8

   a. Use Bernoulli’s to get ha (ref & points in pict.)

   b. Include all minor losses

c. Correct results

ii. Increase of pump power with new required flow rate 3/8 out of 3/8

a. Recalculate velocity

b. Included all minor losses?

c. Correct results

iii. New pipe diameter with same original pump 4/8 out of 4/8

a. Included all minor losses?

b. Wrote full equation with diameter as unknown

c. Iteration process

d. Correct results

2. Pipe-elbow forces

i. Correct control volume and points 1/8 out of 1/8

ii. Free body diagram and correct forces 1/8 out of 1/8

iii. Force in x – solve for Rx (need to use Bernoulli's) 3/8 out of 3/8

iv. Force in y (weight) – solve for Ry 2/8 out of 2/8

v. Correct results 1/8 out of 1/8

3. Pump preselection

i. Why kinetic pump? Why radial pump? 1/6 out of 1/6

ii. Use pump map? 1/6 out of 1/6

iii. Draw desired operating point in pump curves 1/6 out of 1/6

iv. Pump suction, discharge size, and impeller sizes 1/6 out of 1/6

v. Pump power, efficiency, size, and weight 1/6 out of 1/6

vi. Correct results 1/6 out of 1/6"

Is the given rubric I will use and the writing rubric on the test itself, also looking into the solutions themselves, I will point out where I can see myself going right or wrong. Starting at part a through c, I felt that we got all the points so 90 points or 100%.

3.)

0a) the only issue I came into contact was my own sleep schedule. I often need to physically rest, or I cant sleep. On the test however, in finding hA I needed to sit back and remember what I was taught.

b) I didn't just look at the test the day it opened, I started work. That helped the best.

c) mostly the concepts of minor losses and how they would function.

d)in the idea of time management, we used this during the test and I feel that engineers use this everyday.

e) I will use these skills in everyday life.

f) I believe that this will be most important in a career.

g) my previous answers about time management.

h) I used this time management mostly in my ENGT 305 class to do assignments early. I passed that class because of this.

I) I felt that I was most successful in the sitting back and staying calm method.

j) I feel I have answered this question but I will still work on anything that I haven't cleared up.

k) I spent all the allotted time working and thinking on this test, even texted the professor the day it opened.