Test 3 reflection

To be honest I didn’t read the “READ FIRST” part of the test. So, the problem I feel most confident with was problem number one. That is the problem I will be grading myself. The first mistake I noticed from comparing my test to the solution was that I was missing reduction head loss from each branch which is my main source of error. If cutting out the missing head loss I feel that the procedure I did to continue solving the problem was correct. I did have a total of 3 equations and 3 unknowns. my steps to solve the system are the same as the solution first assuming Q1 and solving for Q2 and Q3 using the equations I came up with then adding Q2 and Q3 to get a new Q1 and comparing it to the assumed Q1. When putting the equations in excel to solve for Qs, I feel confident that I put in the equations correctly. The solution shows a different process of how everything was put into excel than the way I did it. I tried to compare them, and I noticed that the solution used a lower assumed Q1 than the one I used and did many more iterations. Overall, the result I got was close to the solution. If I have accounted for the reduction my result might have been closer to the result provided in the solution.

1. PROBLEM 1 or 2)
   1. Reasonable assumptions (reductions, valve, tubing diam, lengths)     0.7/10
   2. Apply Bernoulli twice or get 2 equations from Bernoulli                         1/10
   3. Consider ALL minor losses? Handled them correctly?                           1.6/10
   4. Handled correctly the pipe losses?                                                        0.7/10
   5. Obtained 3 equations with 3 unknowns?                                               1/10
   6. Solved system of equations correctly (Excel?)?                                     2.2/10
   7. Final results                                                                                            0.6/10

**TOTAL                                                                                                    7.8/10**

FINAL GRADE:

**(90)\*(7.8/10) = 70.2**