ME (Mechanical Energy) Balance Utilizing an Unknown Flow Rate or an Unknown Diameter – Find an interesting online video related to fluid flow. Design your own ME problem which requires solving either for volumetric flow rate (velocity) or pipe diameter based off this video. The piping system must include valves and fittings. These types of problems are iterative in nature and require a guess/check, solver, or given/find solution method.

Submission Timeline and Requirements:

A. (Day 1-7) Upload a typed copy of your problem statement as a post to the appropriate forum on Moodle. Make sure to include a link to the video. Points will be awarded based on problem feasibility and creativity. Solve your problem (correctly) using either Excel or Mathcad and create a pdf of your solution.
B. (Day 8-10) Solve another students' problem and post a pdf of your solution to their problem under their post.
C. (Day 11-12) Once someone has completed your problem, post a pdf of your solution to your problem under your post.
D. (Day 13-14) If the two answers do not align, figure out what needs to be fixed. (*Make sure the problem statement is clear and includes all necessary information to solve the problem. Make adjustments to your problem as needed.*) Little to no credit will be given to problems with incorrect solutions or cases where the 2 solutions do not align.