

## Test 1 Homework Reflection

In Homework 1.1, I gained experience in calculating pressure using the force over area formula. Additionally, I practiced finding compressibility force and learned how to determine specific gravity and specific weight using various methods. By understanding the relationship between mass, volume, and density, I was able to make these connections. Moreover, I practiced finding viscosity using charts and equations.

In Homework 1.2, I learned how to measure pressure by using the change of pressure equation, which involves multiplying the specific weight of a fluid with the change in vertical distance. The process involves starting from point A and moving through each fluid. If the height change is downward, you add the specific weight of the fluid times the height change, and if it is upward, you subtract the specific weight times the height change. This is because the pressure increases as an object goes deeper into the fluid.

In Homework 1.3, I practiced using the Bernoulli's equation and the volumetric flow rate equation to calculate pressure change, velocity, flow rate, or height. I learned to make use of the flow rate equation to determine velocity if it was not given. Additionally, I practiced calculating head loss due to pipe friction, pipe fittings, entrances, and valves, and learned how to calculate pump head. Overall, these homework assignments provided me with valuable experience and knowledge in fluid mechanics.