ME 572 Aerodynamic Design
HW #4 (Due at 11:59 pm on Friday, Mar 08)

Problem 1 [10 pt]
A Pitot tube on an airplane flying at standard sea level reads 1.09×10^5 N/m^2. What is the velocity of the airplane? (Round the final answer to two decimal places.)

Problem 2 [10 pt]
Show that a uniform flow with velocity V_∞ is a physically possible incompressible flow and that it is irrotational.

Problem 3 [10 pt]
Show that a source flow is a physically possible incompressible flow everywhere except at the origin. Also show that it is irrotational.