An Internet Book on Fluid Dynamics

Problem 410A

The potential flow around a sphere yields a surface velocity of $(3U \sin \theta)/2$ where U is the free stream velocity and the angle, θ , is measured from the front stagnation point. What cavitation inception number would you anticipate for this flow if the liquid can withstand a tension of $(0.2\rho_L U^2)$ where ρ_L is the liquid density?