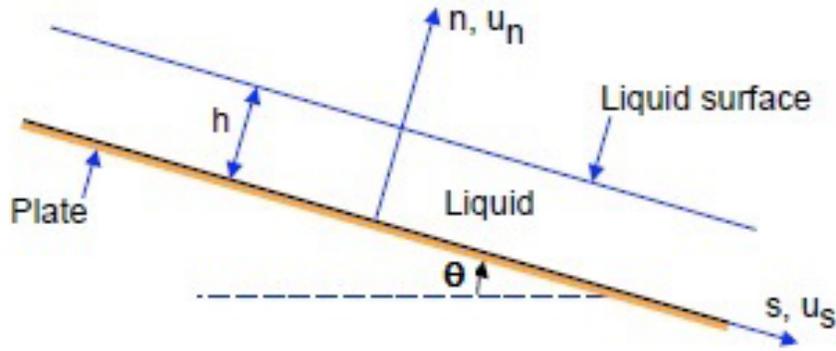


Problem 109F:

A constant and uniform layer of Newtonian, viscous, incompressible liquid (dynamic viscosity, μ , and density, ρ) flows down a flat plate inclined at an angle, θ , to the horizontal:



The constant and uniform thickness of the layer is denoted by h . Find the expression for the velocity profile, $u_s(n)$, that involves n , h , ρ , g and μ .