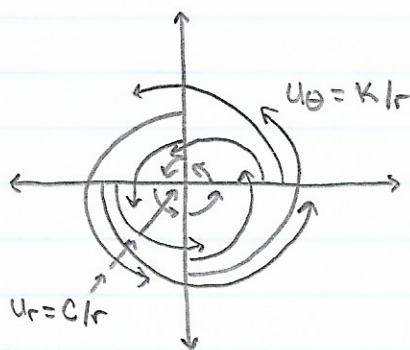
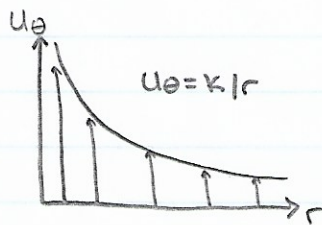


Consider steady, two-dimensional, incompressible flow due to a spiraling line vortex/sink flow centered on the z -axis. Streamlines and velocity components are shown below. The velocity field is $u_r = C/r$ and $u_\theta = K/r$, where C and K are constants. Calculate the pressure as a function of r and θ .



From Çengel & Cimbala, Problem 9-89