

F13. You stick your hand out the window of a car traveling at 75 mph, palm into the wind. The ambient air conditions are  $\rho = 1.2 \text{ kg/m}^3$ ,  $p = 10^5 \text{ Pa}$ ,  $T = 300 \text{ K}$ . For air,  $c_p = 1004 \text{ J/kg K}$ . Determine the conditions on the stagnation point on your palm.