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.