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