ASSIGNMENT 5

CHEMISTRY 300

Due: 4:30 Wednesday 22 October 2008

1. Do question 10 on page 852 of the text.

2. Starting with:

$$p = \frac{1}{3}\left[(\mathbf{\Gamma}_{m\mathbf{v}})_{xx} + (\mathbf{\Gamma}_{m\mathbf{v}})_{yy} + (\mathbf{\Gamma}_{m\mathbf{v}})_{zz}\right]$$

   show that:

$$p = nk_BT$$

3. Show that for effusive flow:

$$\Gamma_n = \frac{1}{4}n\langle v\rangle$$