EN221: HW #3, Due Wednesday, 10/08.

All problems in this set are from Ogden's book. Note that he uses the symbol $\mathbf{A}$ to denote the deformation gradient.

1. Problem 2.2.12, Page 107. (Note that $\mathbf{B}$ in this problem stands for the inverse-transpose of the deformation gradient. In the notation used in class it is $\mathbf{F}^{-T}$. You will have to use Lagrange's multipliers for minimization since $N_1^2 + N_2^2 + N_3^2 = 1$.)

2. Problem 2.2.13, Page 107.

3. Problem 2.2.14, Page 108.