

6.6 #2

Let

$$Lu = - \sum_{i,j=1}^n (a^{ij} u_{x_i})_{x_j} + cu.$$

Prove that there exists a constant  $\mu > 0$  such that the corresponding bilinear form  $B[ \cdot, \cdot ]$  satisfies the hypotheses of Lax-Milgram Theorem, provided

$$c(x) \geq -\mu \quad (x \in U).$$