Econ 703                                                                              Prof. R. Deneckere
Fall 2002

**Homework #9**
**(due Nov. 19, 2002)**

1.      Sundaram, #7, p.143

2.      Sundaram, #9, p.143

3.      Sundaram, #11,p.144

4.      If x thousand dollars is spent on labor and y thousand dollars is spent
        on equipment, a certain factory produces $Q(x,y)=50\ x^{1/2}y^{2}$ units of output.
        a) How should $80,000 be allocated between labor and equipment to yiled
        the largest possible output?
        b) Use the Envelope Theorem to estimate the change in maximum output if
        this allocation decreased by $1000.
        c) Compute the exact change in b).