Economics 58
Fall 2009

Problem Set # 1

Due 9/14/09

1. Text Problems 2.3 and 2.4
2. Text Problem 2.7.
3. Text Problem 2.11
4. Suppose an economy produces two goods, x and y and that the production possibility frontier is given by $x^2 + y^2 = 100$. Utility in this economy is given by $U(x, y) = ax + by$.

 a. Find the allocation the maximizes utility given the constraint provided by the production possibility frontier (Note: your solution will depend on a and b).
 b. Discuss the role the parameters a and b play in determining the optimal allocation.
 c. Graph your results for the case $a = 1$, $b = 2$.