Wilf Csaplar Jr.   Economics 477   Homework #1   Due 9/02

Do not write your name on the assignment. Write your name only on the back of this sheet of paper and staple your answers on the front of this sheet of paper. Failure to follow these directions will cost you 1 point on the assignment.

For all questions, show all work. You will not get credit for an answer given without the work.

1) (15 points) Minimize your costs(fair ticket, golf) $= 5f + 10g$ subject to a utility level represented by $f*g = 24$.

2) (20 points) Maximize U(bananas, apples) $= a*b$ subject to your income of $10, where an apple costs $1.00 and a banana costs $0.50. Show all work.

3A) (15 points) Maximize U(honey, irises) $= h^2 + i^2$ subject to income of $h + 4i = 17$.
3B) (15 points) Draw the diagram of part A to show that you really minimized rather than maximized.

4) (35 points) Maximize U(chicken, donuts, eggs) $= c^{1/2} + 2d^{1/2} + e^{1/2}$ subject to your budget constraint of $c + d + e = 17$ and a fat constraint of $2c + 2d = 16$. (Pretend that eggs have no fat.)