Wilf Csaplar Jr.   ECON/BUSI 205   Homework #5   **Due Tuesday 3/22**

Place your name on the back of this sheet of paper and nowhere else. Staple your answers on the front of this sheet of paper. Failure to follow these directions will cost you 1 point. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

Show all calculations and all work on all questions.

1) (15 points) Solve this system of equations using the graphing method. (Remember what goes on the axes from your ECON 302 class.) $S = -10 + 10r$, $I = 56 - 2r$.

2) (10 points each) Use the elimination method to solve each system of equations.
A) $Q_S = -3 + 5P$, $Q_D = 57 - P$
B) LRAS: $Y = 1000$, SRAS: $Y = 900 + 10P$, AD: $Y = 1100 - 5P$

3) (15 points) Use row operations to solve this system of equations
$3X + 2Y = 6$
$-3X + 2Y + Z = 6$
$3X + 6Y + Z = 17$

4) (15 points each) Write the system of equations as a matrix. Use row operations to get it into row-echelon form. Then solve the system.
A) $100r + Y = 103$, $-200r + 2Y = 194$
B) $5P + Q = 200$, $-P + Q = 180$

5) (20 points each) Write the system of equations as a matrix. Use row operations to get it into row-echelon form. Then solve the system.
$X + 3Y = 10$
$2X - Y + 4Z = 20$
$X + 10Y - 4Z = 10$