MAT 121    Test 4 Take-Home, Spring, 2011
20 Points                                                Name_____

This take-home test is due on Friday, April 22$^{nd}$, at the beginning of class.  Any time before that will suffice, but it will not be accepted after 8:50 a.m. on Friday.

1.  (15 pts)  Define variables, derive the equations, and write the augmented coefficient matrix for the following word problem.  Then solve.

John invested a total of  $6530.00 in three areas:  growth stocks, municipal bonds and blue-chip stocks.  His rate of return at the end of a year was 10%, 5% and 2% from each area,  respectively, and he earned a total of $306.30.  Assuming he invested twice as much in municipal bonds as in growth stocks, how much did John invest in each area?

2.  (5 pts)  Check your answer to #1 with matrix multiplication.