## College Mathematics

spreadsheet project
Create one Excel workbook containing three worksheets as described below.
E-mail the workbook to me as one attachment by Monday, April 2, 2012.
Include your full name in the subject line.
If everything looks reasonably accurate, we'll set a time for a short meeting during which you will explain and demonstrate how to build a similar worksheet.
(1) For the annuity, follow the form shown below:

| payment <br> number | interest earned | payment <br> amount | balance |
| :---: | :---: | :---: | :---: |
| 1 | - |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |
| 6 |  |  |  |

The user should be able to change the interest rate and the monthly payment at the top of the spreadsheet, and everything else should update automatically.

Build the worksheet to show the step-by-step accumulation in an annuity over a 40-year period.
(2) For the loan, follow the form shown below:

| payment <br> number | payment <br> amount | part <br> to interest | part <br> to balance | balance |
| :---: | :---: | :---: | :---: | :---: |
| $(0)$ | - | - | - |  |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |

Your worksheets should work like the example (http://www.austincc.edu/herbling/amortize.xls). In particular, the user should be able to change the interest rate, the monthly payment, and the amount of the loan (starting balance) in one location, and everything should automatically adjust.
(a) Build one worksheet to show a loan being paid, step-by-step, over a 3-year period.
(b) Build another worksheet to show a loan being paid, step-by-step, over a 30-year period.

