

**Make an amortization schedule in a spreadsheet.****This must be a single schedule, a single sheet, a single page.****Design the single schedule so you can easily change the payment amount.**

Hints: The loan (note) data should be at the top of the schedule. There should be a row for  $t=0$ . Every cell in the row for  $t=1$  should be a formula, using both absolute and relative cell references. Once this row is correct, copy it down for rows 2 through 30. The sheet must **calculate** the fully-amortized payment amount, using a formula.

Amortization schedules show (1) the unpaid balance at each point in time and (2) the breakdown of each periodic payment into its interest and principal repayment components. Amortization schedules can also be used to “see” many different kinds of loans (by changing the payment amount). (After you’re done, can you name each of the 5 loan types below?).

A. Provide the results of your amortization schedule for a \$200,000, 30-year, 8% loan (repaid annually), using each of the following annual payment amounts:

Payment Amount

1. The Fully-Amortized payment amount  
(you must use a formula)
  2. \$16,000
  3. \$17,000
  4. \$14,000
  5. \$0
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B. Hide the rows for the years 6 through 29.

C. Insert your name in the left footer, the print date in the middle footer, and the full file name in the right footer (on your single page, your single sheet).

D. Print one page for each of the 5 payments above (from your **single** schedule). In other words, input a payment and print the page, input another payment and print the page, etc. Make sure your pages show, for each of the 5 payment amounts, the unpaid balance ( $B_t$ ) at the end of 5 years ( $B_5$ ), and at the end of 30 years ( $B_{30}$ ).

E. Print a 6<sup>th</sup> page that shows the **formulas** and the spreadsheet **row and column headings** for your single sheet. This page must show the formula you used to calculate the fully-amortized payment amount.

F. Turn in your 6 printed pages, formula page on top, stapled, on the due date.