Example: Low Rate or Rebate?

- After bringing home your new-born baby, you decide your new expanded family needs a brand-new minivan. You decide upon a 2004 Dodge Grand Caravan SE costing $26,500 plus tax, doc fee and license. You have enough cash to pay the tax and other fees (~$1800 in Illinois) and need to finance $26,500.
- Dodge offers the choice of two incentives on the Grand Caravan. Rebates will be applied toward the purchase price.
  - $2,000 rebate plus 0% APR Financing for 48 months, or
  - $4,500 rebate. If you elect to take this rebate, you can get 4.29% APR (online Capital One) financing for 48 months.
- Question: Which incentive would give the you the lowest monthly payment?

Example: Homer the Entertainer

- Imagine Homer Simpson actually invested the $100,000 he earned providing Mr. Burns entertainment 6 years ago at 8% APR compounded quarterly and starts investing an additional $500 at the beginning of each quarter starting today 20 years at the same 8% APR compounded quarterly. How much money will Homer have 20 years from today?
Example: Enjoying your Retirement (might do in discussion section)

- You go ahead and make the contributions starting at age 22 from last week’s example, giving you $1,058,030 at age 65.
- You expect to live to age 85. So, you want to make 20 annual withdrawals from your IRA paying 9% at the beginning of each year starting at age 65 that keeps pace with expected inflation of 3% annually.
  - How large can this real (in terms of age 65 dollars) annual withdrawal be?
  - What will your last withdrawal be in terms of nominal (actual) dollars?