Loans and Loan Payments Homework Exercise

Use the Loan Repayment Tables (Tables 3-5) to answer these questions. Feel free to use the spreadsheet to double-check your answers.

1. Ally just borrowed $28,000 to purchase a small shed and some honey-extracting equipment. The loan is for 5 years at 6.5% APR with annual payments.

    a. Estimate how much interest Ally will owe in the first year.

    b. Calculate the annual loan payment for this car loan.

    c. Calculate how much principal Ally will be repaying in the 1st loan payment.

2. Bob & Jane borrowed $135,000 to buy some farm land. The mortgage is for 25 years at 7% APR.

    a. Calculate the monthly payment on Bob & Jane's mortgage.

    b. Estimate how much interest Bob & Jane will pay over the 25-year life of this loan.

3. Andrew really wants to buy a car for $17,000. The car dealer has offered him 2 different loans. Loan A is a 5-year loan at 6.5% APR with monthly payments. Loan B is a 3-year loan at 5.5% APR with monthly payments.

a. Calculate the monthly loan payment for Loan A. Show your work.

b. Calculate the monthly loan payment for Loan B. Show your work.

c. Which loan would you choose if you were in Andrew's position? Briefly explain why you chose either Loan A or Loan B.

4. Greta needs help with the Liabilities section of her balance sheet. She has just taken out a loan for $45,000 to buy a new refrigerator. The loan is for 5 years at 5% APR. It has annual payments. Help Greta determine what to list on her balance sheet for this loan. Use the 3-Step Process

a. Calculate the annual loan payment for this loan.

b. Calculate the amount of interest she is supposed to pay this year. (Step 1)

c. Calculate the amount of principal due within I year (the current liability portion of this loan). (Step 2)

d. Calculate the amount of principal Greta will owe after this payment is made (the non-current liability). (Step 3)