

Mr Kaufman

Advanced Algebra with Financial Applications Midterm Review ***with
Deferred Payments***

- 1) Jamie wants to earn \$500 in simple interest so she'll have enough to buy a used car. She puts \$2000 into an account that earns 5% interest. How long will she need to leave her money in the account to earn \$500 in interest? **5 years**

- 2) Kelly plans to put her graduation money into an account and leave it there for 4 years while she goes to college. She receives \$750 in graduation money that she puts it into an account that earns 4.25% simple interest. How much will be in Kelly's account at the end of four years? **877.50**

- 3) Suppose Karen has \$1000 that she invests in an account that pays 3.5% interest compounded quarterly. How much money does Karen have at the end of 5 years? **1190.34**

- 4) What is the future value if you deposit \$325 every month for 5 years into an account earning 6.2% APR? **22,792.19**

- 5) Review the differences between:
 - a) simple interest and compound interest.
 - b) Present value and future value
 - c) Checking accounts, savings accounts, money market accounts and Certificates of Deposit
 - d) Previous Balance Method, Unpaid Balance Method and Average Daily Balance method

- 6) What is the CPI? What is it used for?

7) Year	CPI
1970	93
1975	100
1980	107
1985	113
1990	140

Round all answers to the nearest hundredth:

a) What is the percent increase in prices from 1980 to 1990?
30.8%

b) Food cost \$6.83 in the base year. How much did it cost in 1985?
\$7.71

8) Your billing cycle closes on March 30 and you have an outstanding balance of \$5,000.00. A payment is received on April 15 for \$1,500. You receive a credit of \$350 on April 25. Your payment is due on May 1. Annual interest is 14.99% Calculate the finance charge for each of the following for one month:

a) Previous Balance Method	62.46
b) Unpaid Balance Method	39.35
c) Average Daily Balance Method	51.59

9) Review credit scores, what are the components of your credit score and how long things stay on your credit report.

10) Review how to do a bank reconciliation – what items get added/deducted from the bank statement and what items get added/deducted from the check register balance.

11) You buy something on 01/01/10 for \$18,250 that has a deferred payment for 1 year : payment is due on 01/01/11 and no interest is due if you pay on time. Interest accrues at 18.5% compounded monthly.

a) How much do you owe if you make payment on 12/31/10?
18,250

b) How much do you owe if you make the payment on 1/02/11?
21,927.76

c) What are the finance charges if you pay on 01/02/11?
\$3,677.76

12) Cell phone contract: \$25 per month and \$0.30 per minute OR \$50 per month and \$0.12 per minute. After how many minutes will both deals cost the same amount? **139 minutes**

13) You purchase a TV for \$1,575. Sales tax is an additional 6%. Your down payment is 25% and the balance will be financed for 36 months at an APR of 19.2% interest.

a) What is the total purchase price of the TV? **1,669.50**

b) What is the downpayment? **417.38**

c) What is the amount financed? **1252.13**

d) What is the monthly payment? **46.02**

e) What are the total of the monthly payments on the loan?
1656.89

f) What are the total finance charges you pay? **404.76**

g) What is the total cost of the TV including the finance charges? **2074.27**

14) Anything else I covered.