1. In 5 years the student population at MCCC increased from 6500 to 8250 (5 pts.)
    Find the percent of increase.

2. An item including sales tax cost $510. The sales tax is 6½%. What was the original cost of the item? (6 pts.)

3. Find simple interest for a 3-month loan of $4570 at 8.5% per year. (8 pts.)

4. Susie paid $4600 for living room furniture. She made a down payment of $1000 and financed the balance on a 36-month fixed payment installment loan. The monthly payments are $120.87. When making her 18th payment, she decides to pay the balance. (Use table on last page.)
   a. Determine APR of the loan. (4 pts.)
   b. How much interest will she save? (see last page) (8 pts.)

5. If $3770 is invested for 4 years at 9% compounded semi-annually, find: (8 pts.)
   a. the amount. Use \( a = p \left(1 + \frac{r}{n}\right)^{nt} \)
   b. the interest at the end of 4 years.
6. The balance on Andy's credit card amount on August 1, the billing date, was $517.99. He had the following transactions during the month of August. The company's annual percentage rate is 16.8%.

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 8</td>
<td>restaurant charge</td>
<td>$ 74.66</td>
</tr>
<tr>
<td>August 14</td>
<td>payment</td>
<td>$190.00</td>
</tr>
<tr>
<td>August 20</td>
<td>clothes charge</td>
<td>$130.93</td>
</tr>
<tr>
<td>August 25</td>
<td>food charge</td>
<td>$ 80.66</td>
</tr>
</tbody>
</table>

a. Find the average daily balance. (8 pts.)

b. Find the finance charge that is due on September 1. (5 pts.)

c. Find the balance due on September 1. (5 pts.)

7. A partial payment is made on the indicated date. Use the United States Rule to determine the balance due on the note at the date of maturity. Rate 13%. (8 pts.)

<table>
<thead>
<tr>
<th>Principle</th>
<th>Effective Date</th>
<th>Maturity Date</th>
<th>Partial Pay</th>
<th>Pay Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>$800</td>
<td>April 11</td>
<td>July 27</td>
<td>$200</td>
<td>May 15</td>
</tr>
</tbody>
</table>

8. The Spendies are buying a house selling for $290,000. The lending institution is requiring a minimum down payment of 10%. To obtain a 20-year mortgage at 8.5%, they must pay 2 pts. at the time of closing.

a. Find the required down payment. (3 pts.)

b. What is the amount of the mortgage? (3 pts.)

c. What is the cost of the points? (3 pts.)
9. The Blums obtained a 30-year $180,000 conventional mortgage at 8% on a house selling for $235,000. The bank charged 1 pt. at the time of closing. Their monthly mortgage payment, including principal and interest, is $1320.78.

a. Determine the total amount the Blums will pay on their house. (6 pts.)

b. How much of the cost will be interest? (6 pts.)

c. How much of their first payment on the mortgage is applied to the principle? (6 pts.)

10. Bill's gross monthly income is $5280. He has 14 remaining payments of $250 per month on a car. (8 pts.)

a. What is the maximum monthly payment the bank says Bill can afford?

b. He would like to get a 30 year $140,000 mortgage at an 8.5% interest rate. If the taxes and fire insurance on the house are $285 per month, does he qualify for loan?