1. The Easy Loan Company charges 28% simple interest (annual) for a 2-year, $600 loan. Find:
   a. The total interest on this loan.
   b. The interest for three months.
   c. The total amount to be paid to the loan company at the end of two years.

2. A state has a 6% sales tax. Find:
   a. The sales tax on a microwave oven priced at $320.
   b. The total cost of this oven.

3. In a sale, a store offers a 20% discount on a freezer chest that is normally priced at $380.
   a. How much is the discount?
   b. What is the sale price of the freezer?

4. Here is a portion of a compound interest table to use in this problem.

<p>| Amount (in $) to which $1 will accumulate in n periods under compound interest |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|</p>
<table>
<thead>
<tr>
<th>n</th>
<th>2%</th>
<th>4%</th>
<th>6%</th>
<th>8%</th>
<th>10%</th>
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</tr>
<tr>
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<td>1.3686</td>
<td>1.5938</td>
<td>1.8509</td>
<td>2.1436</td>
</tr>
</tbody>
</table>

Find the accumulated amount and the interest earned for:
   a. $100 at 8% compounded semiannually for 4 years.
   b. $100 at 8% compounded quarterly for \( \frac{1}{2} \) years.
5. A credit card holder is obligated to pay his balance in full if it is less than $10. Otherwise, the minimum payment is $10 or 5% of the balance, whichever is more. Suppose a customer received a statement listing a $292.75 balance:
   a. Find the minimum payment due.
   b. The finance charge is 1.5% per month. What will be the amount of this charge on the next monthly statement if the customer makes only the minimum payment?

6. Brenda Brown received a statement showing that she owed a balance of $210 to a department store where she had a revolving charge account. Brenda made a payment of $50 and charged an additional $35. If the store charges 1.5% on the unpaid balance, find:
   a. The finance charge on the next monthly statement.
   b. The new balance.

7. A car costing $8500 can be bought with $1500 down and 10% add-on interest to be paid in 48 equal installments.
   a. What is the total interest charge?
   b. What is the monthly payment?

Use the following table to solve problem 8.

<table>
<thead>
<tr>
<th>True Annual Interest Rate for a 12-Payment Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>14%</td>
</tr>
<tr>
<td>Finance Charge per $100 of the amount financed</td>
</tr>
<tr>
<td>7.74</td>
</tr>
</tbody>
</table>
8. John Bishop borrows $300 and agrees to pay $27.20 per month for twelve months.

a. What is the APR for this transaction?

b. If John decided to pay off the balance of the loan after 5 months (with 7 payments remaining), use the Rule of 78 to find the amount of the interest refund.

c. Find the amount needed to pay off the loan.

9. The Nakos family wants to buy a $70,000 house.

a. If a bank is willing to loan them 75% of the price of the house, what would be the amount of the loan?

b. What would be the down payment for this house?

c. If they decide to obtain an FHA loan instead, what would be the minimum down payment? (Recall that FHA requires a down payment of 3% of the first $25,000 and 5% of the balance up to the maximum loan amount of $67,500.)

d. What would be the maximum FHA loan they could get?

10. Refer to Problem 9. Suppose the Nakos family contracted for a 15-year mortgage at 12% with the bank that loaned them 75% of the price of the house. What is the monthly payment for principal and interest? (Use the following table.)

<table>
<thead>
<tr>
<th>RATE</th>
<th>10 years</th>
<th>15 years</th>
<th>20 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>11%</td>
<td>13.78</td>
<td>11.37</td>
<td>10.32</td>
</tr>
<tr>
<td>12%</td>
<td>14.35</td>
<td>12.00</td>
<td>11.01</td>
</tr>
<tr>
<td>13%</td>
<td>14.93</td>
<td>12.65</td>
<td>11.72</td>
</tr>
</tbody>
</table>
1. A loan company charges 28% simple annual interest for a 2-year, $600 loan. The total interest on this loan is
   a. $168   b. $336   c. $936
d. $1008   e. None of these

2. The total amount to be paid on a 2-year, $600 loan at 28% simple annual interest is
   a. $168   b. $336   c. $936
d. $1008   e. None of these

3. What is the sales tax on a microwave oven priced at $320 if the sales tax rate is 6%?
   a. $18   b. $192   c. $19.20
d. $339.20   e. None of these

4. The total cost of the microwave oven in Problem 3 is
   a. $406   b. $300.80   c. $360
d. $339.20   e. None of these

5. A store offers a 20% discount on a freezer that is normally priced at $360. How much is the discount on this freezer?
   a. $72   b. $80   c. $304
d. $280   e. None of these

6. The sale price of the freezer in Problem 5 is:
   a. $72   b. $80   c. $288
d. $280   e. None of these

7. Here is a portion of a compound interest table to use in this problem.

<table>
<thead>
<tr>
<th>n</th>
<th>2%</th>
<th>4%</th>
<th>6%</th>
<th>8%</th>
<th>10%</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>1.0200</td>
<td>1.0400</td>
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<tr>
<td>8</td>
<td>1.1717</td>
<td>1.3686</td>
<td>1.5938</td>
<td>1.8509</td>
<td>2.1436</td>
</tr>
</tbody>
</table>
If $100 is invested at 8% compounded semiannually for 4 years, the accumulated amount is:

a. $116.99  b. $136.86  c. $117.17
d. $126.53  e. None of these

8. A customer received a statement with a $292.75 balance. She was obligated to pay her balance in full if it was less than $10. Otherwise, the minimum payment was $10 or 5% of the balance, whichever is more. The minimum payment due was

a. $10  b. $292.75  c. $14.64
d. $282.75  e. None of these

9. If, in Problem 8, the finance charge is 1.5% per month on the unpaid balance, what will this charge be on the next statement if the customer makes only the minimum payment?

a. $4.17  b. $278  c. $290
d. $4.00  e. None of these

10. Brenda Brown received a statement with a $230 balance. She made a $50 payment and charged an additional $35. If the finance charge is 1.5% per month on the unpaid balance, the new balance on the next monthly statement will be

a. $2.70  b. $232.70  c. $195
d. $204.17  e. None of these

11. A car priced at $8500 can be bought with $1500 down and 10% add-on interest to be paid in 48 equal monthly installments. The total interest charge would be

a. $850  b. $1700  c. $700
d. $70  e. $2800

12. The monthly payment for the car of Problem 11 would be

a. $160.42  b. $215.83  c. $204.17
d. $194.79  e. None of these

13. John Bishop borrowed $300 and agreed to pay $27.20 per month for 12 months. After 5 months, John decided to pay off the balance (7 payments remaining). According to the Rule of 78, his interest refund would be

a. $15.40  b. $190.40  c. $65.28
d. $9.70  e. $9.48
14. In Problem 13, the amount needed to pay off the loan after 5 months is
   a. $190.40   b. $180.92   c. $175
   d. $126.45   e. None of these

15. The Turner family wants to buy a $70,000 house. If the bank will loan them 75% of the price of the house, what will the down payment be?
   a. $52,500   b. $4500   c. $17,500
   d. $15,000   e. None of these

16. What would be the down payment on an FHA loan on the house of Problem 15? (Recall that FHA requires a 3% down payment on the first $25,000 and 5% of the balance up to a $67,500 maximum.)
   a. $2000   b. $3000   c. $2500
   d. $7500   e. None of these

17. The maximum FHA loan that could be obtained to buy the house in Problems 15-16 is
   a. $60,000   b. $70,000   c. $67,000
   d. $62,500   e. None of these

The following table is to be used in Problems 18-20.

<table>
<thead>
<tr>
<th>Rate</th>
<th>Monthly Payment ($) for Each $1000 Borrowed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10 years</td>
</tr>
<tr>
<td>11%</td>
<td>13.78</td>
</tr>
<tr>
<td>12%</td>
<td>14.35</td>
</tr>
<tr>
<td>13%</td>
<td>14.93</td>
</tr>
</tbody>
</table>

18. A family contracted for a 15-year mortgage at 12% on a 75% loan to buy a $70,000 house. Their monthly payment for principal and interest was
   a. $720   b. $540   c. $495.45
   d. $630   e. None of these

19. The total interest charge on the house of Problem 18 amounts to
   a. $63000  b. $84000  c. $60,900
   d. $52,200  e. None of these

20. Suppose the term of the mortgage of Problem 18 was extended to 20 years. What would the difference in the monthly payment be?
   a. $51.98  b. $0.93  c. $93
   d. $11.88  e. None of these