All math problems address TEKS 130.243. Dollars and Sense.

(1) The student demonstrates management of individual and family resources such as finances, food, clothing, shelter, health care, recreation, transportation, time, and human capital. The student is expected to:

(A) analyze the economic rights and responsibilities of individuals as consumers.

Question 1. Sara recently bought a $3,635 television with her credit card. If she forgets to make the first payment and incurs a penalty of 29.99% on her outstanding balance, how much will she owe for the television?

a. $1090.14  
b. $3635.00  
c. $4725.14  
d. $9901.65
(2) The student demonstrates management of financial resources to meet the goals of individuals and families across the life span. The student is expected to:

   (C) connect mathematics to the understanding of interest, including avoiding and eliminating credit card debt.

**Question 2.** The chart below represents the credit card balance and the minimum payment per month assuming that the minimum payment is made every month and there are no incurred penalties.

<table>
<thead>
<tr>
<th>Balance</th>
<th>$1000</th>
<th>$980</th>
<th>$957.60</th>
<th>$932.51</th>
<th>$904.41</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. Payment</td>
<td>$125</td>
<td>$125</td>
<td>$125</td>
<td>$125</td>
<td>$125</td>
</tr>
</tbody>
</table>

If this pattern continues and the credit card continues to charge 12% interest on the outstanding balance each month, which expression could be used to find the amount left in the account that has \( B \) dollars in the account before you make the minimum payment for the month?

a. \( 0.12B - 125 \)

b. \( (B - 125) \cdot 1.12 \)

c. \( 1.12(B - 125) \)

d. \( 1.12B - 125 \)
(2) The student demonstrates management of financial resources to meet the goals of individuals and families across the life span. The student is expected to:

   (A) evaluate the need for personal and family financial planning, including budgeting, expense records, and maintaining economic self-sufficiency.

**Question 3.** Aaron takes out a small business loan at the bank to help start a barbershop. He takes out $5,000 at an interest rate of 6% and doesn’t have to make a payment on the principle for 18 months. If he makes no payments during the 18 months, how much does he owe the bank if the 6% interest for the first 18 months is added?

   a. $ 5,400  
   b. $ 7,200  
   c. $10,400  
   d. $30,000
(1) The student demonstrates management of individual and family resources such as finances, food, clothing, shelter, health care, recreation, transportation, time, and human capital. The student is expected to:

(C) develop and apply multiple strategies for individuals and families to make choices to satisfy needs and wants.

**Question 4.** Analyze the chart below.

<table>
<thead>
<tr>
<th>Family Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Mortgage, 795</td>
</tr>
<tr>
<td>Food, 650</td>
</tr>
<tr>
<td>Utilities, 328</td>
</tr>
<tr>
<td>Phone Bill, 100</td>
</tr>
<tr>
<td>Cable, 40</td>
</tr>
<tr>
<td>Internet, 40</td>
</tr>
<tr>
<td>Misc, 75</td>
</tr>
</tbody>
</table>

If the chart encompasses all of the family expenses, how much does the family need to be making to be able to put 10% into savings and still pay all bills?

a. $2,028  
b. $2,254  
c. $2,502  
d. $3,006
(1) The student demonstrates management of individual and family resources such as finances, food, clothing, shelter, health care, recreation, transportation, time, and human capital. The student is expected to:

(D) analyze the consequences of an economic decision made by an individual consumer such as the decisions to provide safe and nutritious foods, clothing, housing, health care, recreation, and transportation.

**Question 5.** Refer to the chart in question #4. This family has a monthly income of $2,600 and they want to buy a new car. Assuming they will have to carry insurance on the car at $120 a year, how much can they afford for a car payment if everything else stays the same?

a. $452  
b. $560  
c. $572  
d. $600
(1) The student demonstrates management of individual and family resources such as finances, food, clothing, shelter, health care, recreation, transportation, time, and human capital. The student is expected to:

(D) analyze the consequences of an economic decision made by an individual consumer such as the decisions to provide safe and nutritious foods, clothing, housing, health care, recreation, and transportation.

Question 6. Analyze the chart below.

Which of the following is a reasonable conclusion about the family's expenses?

a. The family lives a comfortable lifestyle.
b. The family does not own a car.
c. Half of the family's money goes to Utilities and Food.
d. Home Mortgage is the single greatest expenditure.
(2) The student demonstrates management of financial resources to meet the goals of individuals and families across the life span. The student is expected to:

C) connect mathematics to the understanding of interest, including avoiding and eliminating credit card debt.

**Question 7.** Marcus makes $400 every two weeks. He uses a check cashing system to cash his check every payday that takes 1% of his paycheck in return for the service. If he does this every two weeks for 3 years, how much money does he lose to the check cashing store?

a. $40  
b. $104  
c. $208  
d. $312

(2) The student demonstrates management of financial resources to meet the goals of individuals and families across the life span. The student is expected to:

(D) collect evidence and data related to implementing a savings program, the time value of money, and retirement planning.

**Question 8.** Joseph recently opened up a free checking account at a local bank and also opened a free savings account. He is paid $450 every two weeks and decides to put 2% into savings every two weeks. If he continues this for an entire year and the savings account promises 2.5% growth each year, how much can he expect to have in savings after one year?

a. $108  
b. $234  
c. $240  
d. $323
(2) The student demonstrates management of financial resources to meet the goals of individuals and families across the life span. The student is expected to:

(C) connect mathematics to the understanding of interest, including avoiding and eliminating credit card debt.

**Question 9.** The Smith family decides to buy a $3,000 couch on a rent-to-own plan where they rent it for 5 years paying $50 a month and at the end of the 5 years they have an option to buy the coach for 50% of the original cost. If the Smith family decides to buy the couch at the end of the 5 years, how much will they have paid for the couch?

a. $1,500  
b. $3,000  
c. $4,500  
d. $6,000
(3) The student demonstrates effective consumer skills related to housing needs. The student is expected to:

(A) explain consumer rights and responsibilities associated with renting or buying a home;
(B) analyze legal and financial aspects of purchasing and leasing housing.

Question 10. Analyze the chart below.

Which of the following would not be a reasonable conclusion from the graph?

a. The interest amount plus the principle amount will always equal the monthly payment.
b. The monthly payment is around $1,200 a month.
c. Eventually the principle amount will be greater than the interest amount.
d. The Interest amount will always be the majority of the monthly payment.
Answer Key

1) C
2) C
3) C
4) B
5) B
6) D
7) D
8) C
9) C
10) D