



## **Consumer Math**

### **Semester A Summary:**

This is the first of two courses that comprise Consumer Math. In this course, the student will learn that money is lost or gained depending upon the information a consumer has to help him make informed decisions. Retailers, banks, and credit card companies may not provide consumers with all the information they need to make good decisions. By the end of this course, the student will understand the history of money, define fixed costs and discretionary spending, understand the importance of savings, and recognize the dangers of debt. This course will ask the student to look hard at his financial choices including spending patterns, purchasing motivations, and how to make some difficult decisions.

### **Semester A Outline**

#### **1. Money and Spending**

1. The History of Money: Introducing Trade
  - Explore how the need for trade led to bartering and eventually the development of currency
  - Trace the history of money across the centuries
  - Compute a basic exchange
2. History of Money: Using Metal & Paper as Currency
  - Justify the development of metal and paper currencies
  - Explore how exchanges occur in current economies
  - Compute basic money exchange problems
3. History of Money Activity: Exchanging Currency
  - Discover how currency values are established globally
  - Determine where to find exchange rates
  - Use currency exchange formulas to compute values
4. Department Store Sales
  - Explore how money is used in shopping
  - Determine what items fit within a limited amount of money
5. Calculating Change and Discounts
  - Explore how money is used in shopping
  - Calculate how to save money by using discounts and sales
6. The Department Store: Getting the Best Deal
  - Compare the results of using two different buying scenarios
  - Calculate how you can save money by using discounts and sales
7. History of Money and Department Store
  - Calculate exchange rates using multiplication of decimals
  - Compare the results of using two different buying scenarios
  - Calculate how you can save money by using discounts and sales
8. The Grocery Store
  - Use multiplication to quickly calculate a total
  - Calculate the cost of a single item by using division

9. The Grocery Store: Shopping with Coupons
  - Use multiplication to quickly calculate a total
  - Calculate the cost of a single item by using division
  - Add and subtract money in order to compare cost savings
10. The Electronics Store: Percentages and Sales Tax
  - Use a percentage discount to calculate savings
  - Compute how sales tax increases the amount you pay for something
11. The Electronics Store: Online vs In-Store Savings
  - Use a percentage discount to compare savings
  - Review the use of percentages, adding and subtracting money, and discounts
12. What's My Total Bill?
  - Use various methods of discounting to compare savings
  - Compute two different scenarios each for a grocery store and electronics store purchase
13. The Outlet Mall
  - Explore real-world examples of effective shopping
  - Calculate the impact of discounts and taxes on a total payment
14. Unit Review
  - Review some of the early history of money
  - Complete problems involving foreign exchange rates
  - Compare savings using coupons or percentage discounts
15. Unit Test

## 2. **Controlling Expenses**

1. The Restaurant: The Bill
  - Use estimation to calculate the total bill before ordering
  - Calculate the individual items that go into the restaurant's "grand total"
2. Discounts and Tip
  - Use percentages in order to calculate sales tax and tip
  - Complete calculations to determine the total cost of a restaurant visit
3. Paying Retailers
  - Examine different ways of paying for something
  - Consider the advantages and disadvantages of paying with cash, debit cards, checks, and credit cards
4. Cash, Check, or Charge
  - Examine different ways of paying for something
  - Consider the advantages and disadvantages of paying with cash, debit cards, checks, and credit cards
5. Controlling Your Checkbook
  - Calculate purchases including discounts and sales tax
  - Complete entries in a checkbook register and submit the completed entries as a part of the portfolio
6. Reviewing and Paying the Power Bill
  - Analyze the information on a customer statement such as a bill
  - Use steps for calculating a bill in order to pay by check
7. Time to Pay the Power Bill
  - Analyze the information on a customer statement such as a bill
  - Use steps for calculating a bill in order to pay by check
  - Calculate the cost of various plans and their benefits
8. Comparing Choices
  - Calculate savings on various plans
  - Compare plans and determine the best choice for a given situation
9. Estimating Your Expenses

- Tally monthly expenses
  - Learn to estimate expenses that vary from month to month
  - Calculate monthly expenses and make a savings plan
10. Other Types of Expenses
- Tally monthly expenses
  - Learn to estimate expenses that vary from month to month
  - Calculate monthly expenses and make a savings plan
11. Receipts, Bills, and Estimates, Oh My!
- Calculate how much money is earned when working
  - Compute the amount of time worked and how that translates into wages
12. Interest Rates
- Calculate how much money is earned when working
  - Identify key information for calculating interest earned
13. Time is Money
- Calculate wages earned
  - Compute the amount of time saved with interest earned
14. Unit Review
- Calculate problems using estimation
  - Compute wages using multiplication of decimals
  - Determine “time saved” through analyzing interest rates
15. Unit Test

### 3. **Finances: Income and Debt**

1. Hourly vs. Salaried
  - Explain the differences between gross pay and net income
  - Identify the differences between a salaried employee and an hourly employee
  - Calculate the gross pay differences based on hourly wage rates and salary information
2. Withholdings
  - Explain the differences between gross pay and net income
  - Identify the differences between a salaried employee and an hourly employee
  - Calculate the gross pay and net pay differences based on various deductions
3. How Much Money Do I Spend?
  - Recognize the difference between fixed expenses and discretionary spending
  - Explore the importance of savings in planning a healthy financial future
4. Discretionary and Fixed Expenses
  - Recognize the difference between fixed expenses and discretionary spending
  - Calculate savings based on income and expenses
5. Am I Financially Healthy? Planning
  - Explore the problems caused by spending more than you make
  - Define surplus and deficit as applied to personal spending
  - Calculate fixed expenses and discretionary income
6. Buyer Beware
  - Explore the problems caused by spending more than you make
  - Define surplus and deficit as applied to personal spending
  - Calculate the true cost of some special finance deals
7. CD Investments
  - Explore the problems caused by spending more than you make
  - Compute interest on savings using online CD calculators
8. Saving Is Stability: Controlling Spending
  - Identify the long-term benefits of following a savings plan
  - Explore some of the roadblocks to savings—and see how to overcome them
  - Calculate interest on savings accounts versus credit cards

9. Spendaholics
  - Identify the long-term benefits of following a savings plan
  - Explore some of the roadblocks to savings—and see how to overcome them
  - Calculate the impact of choice on savings
10. How Much Have I Saved?
  - Explore how banks determine their interest rates
  - Calculate interest payments on a savings account based on annual, monthly and daily periods
11. Debt Is Dangerous: Pay More Than the Minimum
  - Explain the danger of carrying debt
  - Explore how credit card companies and banks determine their interest rates
  - Calculate interest payments based on a variety of different payment options
12. Don't Be a Doris
  - Explain the danger of carrying debt
  - Explore how credit card companies and banks determine their interest rates
  - Calculate interest payments based on whole-year, half-year, and quarter-year periods
13. Debt Is Dangerous
  - Explain the danger of carrying debt
  - Explore how credit card companies and banks determine their interest rates
  - Calculate monthly interest earned in a savings account
14. Unit Review
  - Calculate the cost of an item using sales tax and interest charges
  - Compute the equivalent work hours for purchasing a good
  - Review concepts taught in Lessons 1–13 of the unit
15. Unit Test

#### 4. **Dealing with Debt**

1. Debt Ratio
  - Use percentages to determine the maximum amount of money that should be spent on housing costs
  - Calculate how to increase savings by reducing expenses
2. Necessity or Luxury
  - Calculate the impact of luxury items on debt ratios
  - Learn how to increase your savings by reducing your expenses
3. When Debt Is Acceptable: Secured vs. Unsecured
  - Identify the difference between secured debt and credit card debt
  - Calculate the savings that result from paying off debt rather than investing in a savings account
4. When Debt Is Acceptable: Mortgage Loans
  - Describe the specific attributes of mortgage loans that make them good debt
  - Compute different interest amounts due based on different principal amounts due
5. When Debt Isn't Acceptable: Minimum Due and Missed
  - Identify what types of debt are unacceptable
  - Compute the accumulated interest on credit card debt
  - Calculate the impact of cash advances on credit card interest
6. When Debt Isn't Acceptable: Credit Cards
  - Identify what types of debt are unacceptable
  - Compute interest on credit cards
7. When Debt Isn't Acceptable: Rewards Programs
  - Identify what types of debt are unacceptable
  - Compare credit and debit card rewards programs

- Calculate interest on credit card purchases
- 8. I Already Have Too Many Credit Cards
  - Analyze which of your credit cards to pay off first by calculating and comparing interest due
  - Identify the benefits of zero-rate APR balance transfers
- 9. I Already Have Too Many Credit Cards: Debt Ratios
  - Calculate debt ratios using various balance information
  - Identify the problems that can arise from closing credit accounts
- 10. Give Yourself Credit for Avoiding Credit Problems
  - Calculate interest due based on various principal amounts
  - Create a table showing a schedule to pay off a credit card with a given monthly payment plan
  - Compare the impact on principal reduction of changes in monthly payments
- 11. How a Credit Score Works: Financial Decisions
  - Explain what your credit score means and how it is developed
  - Compare the impact different interest rates (caused by high credit scores and low credit scores) can have on balances
- 12. How a Credit Score Works: The Payoff
  - Explain what your credit score means and how it is developed
  - Compare the impact different interest rates (caused by high credit scores and low credit scores) can have on balances
- 13. How a Credit Score Works: The Perfect Score
  - Explain what your credit score means and how it is developed
  - Compare the impact different interest rates (caused by high credit scores and low credit scores) can have on balances
- 14. Unit Review
  - Identify differences among different types of financial transactions
  - Compute savings based on different interest rates
  - Compare interest accrued based on various scenarios
  - Review information and concepts related to dealing with debt
- 15. Unit Test

## 5. Review

1. Unit 1 Review: Money and Spending
2. Unit 2 Review: Controlling Expenses
3. Unit 3 Review: Finances: Income and Debt
4. Unit 4 Review: Dealing with Debt

## 6. Final Exam

1. Final Exam

## Semester B Summary:

This is the second of two courses that comprise Consumer Math. In this course, students will continue to learn how to make good financial decisions. Retailers, banks, and credit card companies may not provide consumers with all the information they need to make good decisions. By the end of this course, the student will differentiate between secured and unsecured debt, learn how to create a budget, examine a credit report, and discover the best way to increase income and decrease expenses. This course will provide the student with the skills to make good financial decisions.

## Semester B Outline

### 1. Debt vs. Savings

1. Secured Debt
  - Identify the differences between secured debt and unsecured debt
  - Calculate the consequences of defaulting on a secure debt
  - Identify the impact of maintaining a good credit score on debt
  - Analyze data in a table
2. Unsecured Debt
  - Identify the differences between secured debt and unsecured debt
  - Calculate the consequences of defaulting on unsecured debt
  - Identify the impact of maintaining a good credit score on debt
  - Analyze and use data from a table
3. Exploring Other Forms of Debt
  - Identify the differences between secured debt and unsecured debt
  - Determine trends within data
  - Analyze and use data from a table
4. Unsecured Debt Payment
  - Identify the steps involved in building a strong credit history and some specific ways of raising your credit score
  - Identify how a good credit score can be advantageous to you
5. Future Wealth
  - Identify the steps involved in building a strong credit history and some specific ways of raising your credit score
  - Determine which debt should be eliminated by comparing several situations
  - Explain the relationship between accrued interest and principal balance
6. Good Credit vs. Bad Credit: An Overview
  - Identify how a high credit score decreases your fixed expenses
  - Calculate how your credit score affects your mortgage payments when you buy a house
  - Calculate how your credit score affects your car payments when you purchase an automobile
  - Determine other ways that your credit score impacts your financial situation
7. Examples of Good Credit
  - Identify how a high credit score decreases your fixed expenses
  - Calculate how your credit score affects your mortgage payments when you buy a house
  - Calculate how your credit score affects your car payments when you purchase an automobile
  - Determine other ways that your credit score impacts your financial situation
  - Interpret and analyze data from tables
8. Examples of Bad Credit
  - Identify how a high credit score decreases your fixed expenses
  - Calculate how your credit score affects your mortgage payments when you buy a house
  - Calculate how your credit score affects your car payments when you purchase an automobile
  - Determine other ways that your credit score impacts your financial situation
9. Savings vs. Debt
  - Calculate interest accrued based on various principal balances
  - Compare total accrued interest to determine savings amounts
  - Determine the differences and sums for each month's credit payments
10. Cars: Used or New
  - Compute how depreciation affects the cost of buying a car

- Compare the advantages (and disadvantages) of buying a used car instead of a new car
- 11.Cars: Lease or Own
  - Compute how depreciation affects the cost of buying a car
  - Compare the advantages (and disadvantages) of buying a used car instead of a new car
  - Identify the differences between leasing a car and buying a car
- 12.Homes: Rent
  - Identify the advantages and disadvantages of owning a home instead of renting
  - Use proportions to work backwards with percentages
- 13.Homes: Mortgage
  - Itemize the various expenses that are a part of the cost of home ownership
  - Calculate net income and allowable housing expense ratios
  - Use proportions to work backwards to compute realized income requirements
- 14.Unit Review
  - Identify differences among different types of financial transactions
  - Compute savings based on different interest rates
  - Compare interest accrued based on various scenarios
  - Review information and concepts relating to dealing with debt
- 15.Unit Test

## 2. **Budgeting**

1. Budgeting
  - Identify how the concepts of budgeting, expenses, saving, credit management, and retirement tie together
  - Calculate the effect that inflation has on your purchasing power
  - Compute how appreciation offsets the effects of inflation
2. Creating a Hypothetical Budget
  - Create a budget using income, fixed expenses, and discretionary expenses
  - Calculate realized income
  - Analyze the impact of expenses on savings
3. Fixed Costs
  - Determine how much money you need in your own emergency fund
  - Calculate the amount of discretionary monies available
4. Assets and "Net" Savings
  - Analyze data for trends in savings
  - Identify ways to create your emergency "safety net"
5. Discretionary Spending: The Extras of Life
  - Calculate how you can save money by eliminating a few simple luxuries
  - Analyze why the earlier you start saving for your retirement, the better
  - Compute how paying down credit card debt can save you more money than investing the same amount of money
6. The Second Job
  - Calculate how you can save money by eliminating a few simple luxuries
  - Determine how a low interest rate, when compounded over a long period of time, can generate a significant return on your investment
  - Analyze why the earlier you start saving for your retirement, the better
  - Compute why reducing discretionary spending doesn't mean you have to eliminate luxuries altogether
7. Emergency Funds: Cash Reserves
  - Identify the important reasons for having an emergency fund
  - Compute the different forms your emergency fund can take

- Calculate the impact different types of investments can have on total interest accrued
- 8. Emergency Funds: Insurance Policies
  - Determine the benefits insurance can have in emergency situations
  - Perform percentage computations involving money and interest compounding
  - Compare accrued interest given different scenarios
- 9. Emergencies – A Brainstorming Activity
  - Identify different situations that may require an emergency fund
  - Calculate the different impacts that using an emergency fund can have on savings
- 10. Budgeting Summary: Reviewing the Process
  - Determine the steps of creating your own budget
  - Identify the steps you should take when you are finally able to create a budget surplus
- 11. Budgeting Summary: The Never-ending Budget Process
  - Determine the steps of creating your own budget
  - Calculate steps you can take to turn a deficit situation into a surplus
  - Identify the steps you should take when you are finally able to create a budget surplus
- 12. Budgeting Summary: Learning from Experience
  - Determine the steps of creating your own budget
  - Calculate steps you can take to turn a deficit situation into a surplus
  - Identify the steps you should take when you are finally able to create a budget surplus
- 13. Unit Review
  - Identify different parts of a budget
  - Compute fixed expenses based on various types of data
  - Use percentages and proportions to calculate realized income
- 14. Unit Test

### 3. **Finances**

1. A Part-Time Job
  - Calculate the ways to increase your income
  - Compute the increase to your income from getting a part-time job
  - Compare net hourly income wage
2. Promotions and Merit Pay
  - Calculate the ways to increase your income
  - Compute increases to your income from getting a job or taking a second job
3. A New Job
  - Calculate the ways to increase your income
  - Compute changes in realized income and discretionary monies
4. Labor Statistics
  - Identify the single best way to increase your income
  - Calculate the actual monetary advantage to getting your high school diploma
  - Compare the benefits of following further educational paths beyond high school
  - Interpret and analyze data in a table using various mathematical operations
5. Investigating Labor Statistics
  - Identify the single best way to increase your income
  - Calculate the actual monetary advantage to getting your high school diploma
  - Compare the benefits of following further educational paths beyond high school
  - Interpret and analyze data from a table

6. Degree Effect
  - Identify the single best way to increase your income
  - Calculate the actual monetary advantage to getting your high school diploma
  - Compare the benefits of following further educational paths beyond high school
  - Interpret and analyze data from a table using various mathematical processes
7. Gifts and Bulk Buying
  - Calculate the impact of using a variety of ways to cut your everyday expenses
  - Determine the financial benefits of using coupons and buying in volume as ways to decrease your expenses
8. Sharing Expenses
  - Calculate the impact of using a variety of ways to cut your everyday expenses
  - Determine the financial benefits of carpooling, using coupons, and buying in volume as ways to decrease your expenses
  - Calculate the financial impact of carpooling
9. Benefits of Coupons
  - Calculate the impact of using a variety of ways to cut your everyday expenses
  - Determine the financial benefits of carpooling, using coupons, and buying in volume as ways to decrease your expenses
  - Demonstrate proficiency with concepts covered in previous lessons
10. Credit Card Debt Revisited
  - Calculate the impact of the single best way to decrease your expenses
  - Determine the financial benefits of paying more than the minimum payment on your credit card bill
  - Compute how a small increase in your monthly payment results in huge savings over time
11. Paying More Than the Minimum
  - Calculate the impact of the single best way to decrease your expenses
  - Determine the financial benefits of paying more than the "minimum payment" on your credit card bill
  - Compute how a small increase in your monthly payment results in huge savings over time
12. Balancing Act of Debt
  - Identify the first step you should take in your campaign to save money
  - Explain why investing in a savings account is not necessarily the first thing you should do to save money
  - Calculate the impact credit card debt can have on your financial well-being
13. Retirement Savings vs. Debt
  - Identify the first step you should take in your campaign to save money
  - Explain why investing in a savings account is not necessarily the first thing you should do to save money
  - Calculate the impact credit card debt can have on your financial well-being
14. Unit Review
  - Compute the impact of changing jobs or taking a part-time job
  - Compare benefits of investing in a savings plan versus paying off credit card debt
  - Identify the instances when investing makes sense
  - Calculate income implications from attaining different levels of education

## 15. Unit Test

### 4. Savings and Financial Planning

#### 1. Goal Setting

- Outline the steps in planning your savings strategy
- Computationally compare the differences between short-term and long-term financial goals
- Calculate the significant impacts of long-term financial goals

#### 2. Short-term vs. Long-term

- Outline the steps in planning your savings strategy
- Computationally compare the differences between short-term and long-term financial goals
- Calculate the significant impacts of long-term financial goals

#### 3. An Introduction to Investing: Being Realistic

- Outline the steps in planning your savings strategy
- Computationally compare the differences between short-term and long-term financial goals
- Calculate the significant impacts of long-term financial goals

#### 4. An Introduction to Investing: Risk

- Identify the relationship between risk and reward
- Compute why high-risk investments do not make good savings instruments
- Calculate the differences diversity can have in your savings program

#### 5. Diversifying Your Savings

- Identify the relationship between risk and reward
- Compute why high-risk investments do not make good savings instruments
- Calculate the differences diversity can have in a savings program

#### 6. An Introduction to Investing: Stock Market

- Identify the relationship between risk and reward
- Compute why high-risk investments do not make good savings instruments
- Calculate the differences diversity can have in your savings program

#### 7. Get It in Writing: Renting

- Identify why it's important to get all your agreements in writing
- Differentiate between negotiable agreements and unilateral contracts
- Practice how to write basic contracts
- Calculate the financial impact of different types of contracts

#### 8. Get It in Writing: Unilateral Contracts

- Identify why it is important to get all agreements in writing
- Differentiate between negotiable agreements and unilateral contracts
- Practice how to write basic contracts
- Calculate the financial impact of different types of contracts

#### 9. The Internet Is Your Friend: Online Banking

- Calculate the advantages of online banking
- Identify the financial benefits of direct deposit and paying bills online
- Determine the time and cost savings of using computer-based financial software programs to help you manage finances

#### 10. The Internet Is Your Friend: Direct Deposit

- Calculate some of the advantages of online banking
- Identify the financial benefits of direct deposit and paying bills online
- Determine the time and cost savings of using computer-based financial software programs to help manage finances

#### 11. The Internet Is Your Friend: Financial Software

- Calculate some of the advantages of online banking
- Identify the financial benefits of direct deposit and paying bills online

- Determine the time and cost savings of using computer-based financial software programs to help manage finances

12.Review: Money's Many Uses

- Review the important concepts presented in the Consumer Math course by completing calculations involving a variety of financial situations
- Identify ways you have already changed your thinking involving your finances
- Plan your future financial activities

13.Review: Planning Ahead and Contracts

- Review the important concepts presented in the Consumer Math course by completing calculations involving a variety of financial situations
- Identify ways you have already changed your thinking involving your finances
- Plan your future financial activities

14.Unit Review

- Calculate the amounts needing to be saved over various periods of time
- Compare the effect of different interest rates on savings
- Review concepts taught during the unit to prepare for the unit assessment

15.Unit Test

5. **Review**

1. Review: Debt vs. Saving
2. Review: Budgeting
3. Review: Finances
4. Review: Savings and Financial Planning

6. **Final Exam**

1. Consumer Math B Final Exam