

Week 1: Basic Arithmetic in Finance

Mini-Lesson 1: Introduction to Financial Arithmetic

- **Content:** Introduction to the role of mathematics in everyday financial situations and the importance of learning financial arithmetic.

Mini-Lesson 2: Adding Money

- **Content:** Understanding how to add different amounts of money, including coins and bills, and the concept of total value.

Mini-Lesson 3: Subtracting Money

- **Content:** Learning to subtract expenses from a given amount, such as deducting purchases from a budget or allowance.

Mini-Lesson 4: Introduction to Multiplication in Budgeting

- **Content:** Exploring the use of multiplication in creating budgets, such as calculating total costs for multiple items or repeated expenses.

Mini-Lesson 5: Division in Financial Planning

- **Content:** Utilizing division in financial contexts, like dividing total expenses into categories or splitting bills among several people.

Mini-Lesson 6: Real-Life Application of Addition and Subtraction

- **Content:** Practical application of addition and subtraction in everyday financial decisions, like managing spending within a budget.

Mini-Lesson 7: Multiplying for Long-Term Goals

- **Content:** Applying multiplication to calculate long-term savings goals, understanding how repeated savings add up over time.

Mini-Lesson 8: Using Division in Discounts

- **Content:** Teaching how to use division to calculate discounts and determining the final price of discounted items.

Mini-Lesson 9: Interactive Budgeting Exercise

- **Content:** Integrating addition, subtraction, multiplication, and division in a comprehensive budgeting exercise, demonstrating how these operations are used together in financial planning.

Mini-Lesson 10: Review and Practical Applications

- **Content:** Reviewing key concepts from the week, emphasizing the real-life application of basic arithmetic in personal finance.

Week 2: Percentages and Discounts

Mini-Lesson 1: Understanding Percentages

- **Content:** Introduction to the concept of percentages and their fundamental role in finance, such as understanding price increases or interest rates.

Mini-Lesson 2: Calculating Percentages

- **Content:** Basic methods of calculating percentages, teaching the formula and its practical application.

Mini-Lesson 3: Percentages in Price Increases

- **Content:** Applying percentage calculations to understand price increases, such as inflation or surcharges.

Mini-Lesson 4: Percentages in Price Reductions

- **Content:** Learning how to calculate percentage-based price reductions, including sales and discounts.

Mini-Lesson 5: Understanding Sales Tax

- **Content:** Explaining what sales tax is and how it is calculated as a percentage of the purchase price.

Mini-Lesson 6: Calculating Total Costs with Sales Tax

- **Content:** Combining the concepts of addition and percentages to calculate the total cost of items including sales tax.

Mini-Lesson 7: Interpreting Discounts and Offers

- **Content:** Teaching how to interpret and calculate various discount offers, such as '20% off' or 'buy one get one 50% off'.

Mini-Lesson 8: Using Percentages in Budgeting

- **Content:** Applying percentages to budgeting, such as allocating a percentage of income to different expenses or savings.

Mini-Lesson 9: Percentages in Banking and Savings

- **Content:** Exploring the use of percentages in banking, like understanding interest rates on savings accounts.

Mini-Lesson 10: Review of Percentages in Financial Contexts

- **Content:** Reviewing and reinforcing the week's topics, focusing on the practical application of percentages in various financial scenarios.

Week 3: Ratio and Proportion in Budgeting

Mini-Lesson 1: Introduction to Ratios

- **Content:** Explaining the concept of ratios and their relevance in financial contexts, such as comparing different quantities or prices.

Mini-Lesson 2: Understanding Proportions

- **Content:** Introducing the concept of proportion, explaining how it relates to ratios and its use in comparing quantities.

Mini-Lesson 3: Ratios in Income and Expenses

- **Content:** Applying ratios to understand the relationship between income and expenses, and how to balance them effectively.

Mini-Lesson 4: Using Ratios for Budget Allocation

- **Content:** Teaching how to use ratios to allocate a budget across different categories (e.g., savings, entertainment, necessities).

Mini-Lesson 5: Proportional Distribution in Savings

- **Content:** Understanding how to distribute savings proportionally, such as saving a consistent fraction of weekly or monthly income.

Mini-Lesson 6: Ratios in Price Comparisons

- **Content:** Using ratios to compare prices of items, such as understanding value for money and making smarter shopping decisions.

Mini-Lesson 7: Proportions in Discounts and Sales

- **Content:** Calculating proportional discounts on products, understanding how to determine the final price after a percentage discount.

Mini-Lesson 8: Ratios in Investment Distribution

- **Content:** Basic introduction to using ratios for dividing investments among different options (stocks, bonds, savings).

Mini-Lesson 9: Real-Life Applications of Ratios and Proportions

- **Content:** Engaging with real-life scenarios where ratios and proportions are used, such as in cooking recipes or in dividing tasks.

Mini-Lesson 10: Review of Ratios and Proportions in Finance

- **Content:** Consolidating the week's learning, emphasizing the practical application of ratios and proportions in everyday finance.

Week 4: Simple Interest Calculations

Mini-Lesson 1: What is Simple Interest?

- **Content:** Introduction to the concept of simple interest, explaining its basic definition and purpose in finance.

Mini-Lesson 2: Understanding Simple Interest Formula

- **Content:** Teaching the formula for simple interest ($\text{Interest} = \text{Principal} \times \text{Rate} \times \text{Time}$) and explaining each component.

Mini-Lesson 3: Calculating Simple Interest

- **Content:** Step-by-step instruction on how to calculate simple interest for different scenarios, such as savings or loans.

Mini-Lesson 4: Applying Simple Interest in Savings

- **Content:** Using simple interest calculations to determine earnings from savings accounts over different time periods.

Mini-Lesson 5: Simple Interest in Loans

- **Content:** Exploring how simple interest applies to loans, including calculating the total interest payable on borrowed amounts.

Mini-Lesson 6: Comparing Interest Rates

- **Content:** Learning to compare different interest rates and their impact on the total interest earned or paid.

Mini-Lesson 7: Simple Interest in Everyday Life

- **Content:** Practical examples of simple interest in daily life, like understanding interest on small loans from friends or family.

Mini-Lesson 8: The Impact of Time on Interest

- **Content:** Demonstrating how the length of time affects the total interest calculated using simple interest.

Mini-Lesson 9: Using Technology to Calculate Interest

- **Content:** Introducing basic financial calculators or apps that can help calculate simple interest.

Mini-Lesson 10: Review of Simple Interest Concepts

- **Content:** A recap of the week's lessons, reinforcing the key concepts and calculations of simple interest.

Week 5: Compound Interest Concepts

Mini-Lesson 1: Introduction to Compound Interest

- **Content:** Explaining the concept of compound interest and how it differs from simple interest.

Mini-Lesson 2: Understanding the Compound Interest Formula

- **Content:** Introducing the formula for compound interest and explaining its components (Principal, Rate, Time, and Number of Compounding Periods).

Mini-Lesson 3: Calculating Compound Interest

- **Content:** Step-by-step guide on calculating compound interest for different scenarios and compounding frequencies (e.g., annually, semi-annually).

Mini-Lesson 4: Compound Interest in Savings

- **Content:** Demonstrating the impact of compound interest on savings over time, highlighting the benefit of regular contributions.

Mini-Lesson 5: The Power of Compounding Over Time

- **Content:** Showing how compound interest accumulates over longer periods and the concept of "interest on interest."

Mini-Lesson 6: Compound Interest in Real-Life Investments

- **Content:** Applying compound interest calculations to understand returns on investments like fixed deposits or bonds.

Mini-Lesson 7: Comparing Simple and Compound Interest

- **Content:** Direct comparison between simple and compound interest, illustrating the differences and benefits of each.

Mini-Lesson 8: Understanding Compounding Frequencies

- **Content:** Exploring how the frequency of compounding (e.g., quarterly, monthly) affects the total interest earned.

Mini-Lesson 9: Compound Interest and Debt

- **Content:** Applying compound interest concepts to understand how debt can grow over time if not managed properly.

Mini-Lesson 10: Using Financial Tools for Compound Interest

- **Content:** Introduction to online calculators or tools for computing compound interest, encouraging practical application.

Mini-Lesson 11: Review of Compound Interest Concepts

- **Content:** Consolidating the week's learning, emphasizing key takeaways and the importance of understanding compound interest in personal finance.

Week 6: Understanding and Using Graphs

Mini-Lesson 1: Introduction to Financial Graphs

- **Content:** Explaining the role of graphs in visualizing financial data and making informed decisions.

Mini-Lesson 2: Describing Line Graphs

- **Content:** Textual explanation of what line graphs are and how they represent financial data over time.

Mini-Lesson 3: Interpreting Line Graphs

- **Content:** Teaching how to interpret line graphs in financial contexts through descriptive examples.

Mini-Lesson 4: Understanding Bar Graphs

- **Content:** Explaining the use of bar graphs in finance, such as comparing monthly expenses or income.

Mini-Lesson 5: Reading Bar Graphs

- **Content:** Guiding on how to read and interpret bar graphs using text-based scenarios.

Mini-Lesson 6: Introduction to Pie Charts

- **Content:** Describing pie charts and their application in representing financial distributions like budget categories.

Mini-Lesson 7: Interpreting Pie Charts

- **Content:** Teaching how to understand pie charts in financial contexts, using descriptive examples.

Mini-Lesson 8: Trends and Patterns in Graphs

- **Content:** Explaining how to identify and interpret trends and patterns in financial graphs through written descriptions.

Mini-Lesson 9: Practical Uses of Graphs in Finance

- **Content:** Discussing practical applications of understanding graphs in personal finance and decision-making.

Mini-Lesson 10: Conceptual Graph Creation

- **Content:** Guiding students through conceptual exercises on creating graphs from financial data in a text-based format.

Mini-Lesson 11: Review and Application of Graph Knowledge

- **Content:** Reviewing the concepts learned about financial graphs and discussing their real-world applications through text-based examples.

Week 7: Unit Price and Best Buy Calculations

Mini-Lesson 1: Understanding Unit Price

- **Content:** Explaining the concept of unit price and its importance in making informed shopping decisions.

Mini-Lesson 2: Calculating Unit Price

- **Content:** Teaching the method to calculate unit price from total cost and quantity, using text-based examples.

Mini-Lesson 3: Comparing Unit Prices

- **Content:** Guiding students on how to compare unit prices of different products to determine the best value.

Mini-Lesson 4: Unit Price in Bulk Buying

- **Content:** Discussing the economics of bulk buying and how unit price calculation is essential in such scenarios.

Mini-Lesson 5: Best Buy Decisions

- **Content:** Introducing the concept of 'Best Buy' in shopping, using unit price as a key factor in decision-making.

Mini-Lesson 6: Unit Price in Everyday Products

- **Content:** Applying unit price calculations to everyday products, like groceries or school supplies.

Mini-Lesson 7: Unit Price and Budgeting

- **Content:** Explaining how understanding unit prices can aid in effective budgeting and financial planning.

Mini-Lesson 8: Special Offers and Unit Price

- **Content:** Discussing how to assess special offers and discounts using unit price calculations.

Mini-Lesson 9: Practical Exercises on Unit Price

- **Content:** Engaging in text-based exercises and scenarios to practice calculating and comparing unit prices.

Mini-Lesson 10: Review of Unit Price Concepts

- **Content:** Consolidating the week's learning, emphasizing the practical application of unit price knowledge in daily financial decisions.

Week 8: Financial Problem Solving

Mini-Lesson 1: Introduction to Financial Problem Solving

- **Content:** Explaining the importance of problem-solving skills in managing personal finances and making wise financial decisions.

Mini-Lesson 2: Analyzing Spending Habits

- **Content:** Teaching how to analyze and reflect on personal spending habits using problem-solving techniques.

Mini-Lesson 3: Solving Budgeting Challenges

- **Content:** Presenting common budgeting challenges and guiding students through problem-solving steps to address them.

Mini-Lesson 4: Decision Making in Saving Money

- **Content:** Using problem-solving skills to make effective decisions about saving money, such as choosing savings methods.

Mini-Lesson 5: Planning for Large Purchases

- **Content:** Applying problem-solving steps to plan for large purchases, including saving strategies and spending analysis.

Mini-Lesson 6: Dealing with Unexpected Expenses

- **Content:** Teaching how to handle unexpected financial situations using systematic problem-solving approaches.

Mini-Lesson 7: Evaluating Financial Products

- **Content:** Guiding students on how to evaluate different financial products (like bank accounts or insurance) using critical thinking and problem-solving skills.

Mini-Lesson 8: Goal Setting and Financial Planning

- **Content:** Discussing the role of goal setting in financial planning and how to use problem-solving skills to achieve financial goals.

Mini-Lesson 9: Negotiation Skills in Finance

- **Content:** Introducing basic negotiation skills for financial contexts, such as bargaining for better prices or terms.

Mini-Lesson 10: Applying Financial Problem Solving to Real-Life Scenarios

- **Content:** Engaging students in text-based real-life financial scenarios where they apply their problem-solving skills.

Mini-Lesson 11: Review and Consolidation

- **Content:** Reviewing key problem-solving strategies and their applications in various financial situations, reinforcing the learned skills.

Week 9: Exploring Financial Ratios and Measurements

Mini-Lesson 1: Introduction to Financial Ratios

- **Content:** Explaining what financial ratios are and their significance in understanding personal finance.

Mini-Lesson 2: Debt-to-Income Ratio

- **Content:** Teaching how to calculate and interpret the debt-to-income ratio, a crucial measure of financial health.

Mini-Lesson 3: Savings Ratio

- **Content:** Exploring the savings ratio, which measures the proportion of income saved, and its importance in financial planning.

Mini-Lesson 4: Expense Ratio

- **Content:** Understanding the expense ratio, which compares expenses to income, and its role in budgeting.

Mini-Lesson 5: Loan-to-Value Ratio

- **Content:** Introduction to the loan-to-value ratio used in borrowing, especially relevant for understanding mortgages.

Mini-Lesson 6: Calculating Interest Coverage Ratios

- **Content:** Teaching how to calculate the interest coverage ratio to understand the ability to pay interest expenses.

Mini-Lesson 7: Understanding Liquidity Ratios

- **Content:** Explaining liquidity ratios, which assess the ability to cover short-term debts, and their relevance in personal finance.

Mini-Lesson 8: Applying Ratios to Real-life Scenarios

- **Content:** Engaging students in applying these ratios to hypothetical but realistic financial scenarios.

Mini-Lesson 9: Financial Health Check Using Ratios

- **Content:** Guiding students on how to conduct a basic financial health check using these ratios.

Mini-Lesson 10: Review and Consolidation

- **Content:** Reviewing all the financial ratios covered, emphasizing their practical application and importance in personal financial management.

Week 10: Geometry in Finance

Mini-Lesson 1: Introduction to Geometry in Finance

- **Content:** Explaining how basic geometric concepts are applied in financial contexts, like in architecture, design, and planning.

Mini-Lesson 2: Understanding Area and Perimeter

- **Content:** Teaching the concepts of area and perimeter and their relevance in real estate, home improvement, and space planning.

Mini-Lesson 3: Calculating Costs Based on Measurements

- **Content:** Using area and perimeter calculations to estimate costs for materials in construction or renovation projects.

Mini-Lesson 4: Volume and Finance

- **Content:** Exploring how volume calculations are used in financial contexts, such as in shipping, storage, and packaging.

Mini-Lesson 5: Geometric Shapes in Design and Cost

- **Content:** Discussing how different geometric shapes influence design and cost, particularly in architecture and product design.

Mini-Lesson 6: Angles and Financial Models

- **Content:** Introducing the concept of angles and their application in financial models and projections, such as in market trend analysis.

Mini-Lesson 7: Scale Drawings and Budget Planning

- **Content:** Teaching how to interpret scale drawings in planning and budgeting, especially in architecture and landscaping.

Mini-Lesson 8: Geometry in Everyday Financial Decisions

- **Content:** Applying geometric concepts to everyday financial decisions, like planning a garden layout or home furnishing.

Mini-Lesson 9: Geometric Patterns in Market Analysis

- **Content:** Introducing basic concepts of how geometric patterns are observed in financial markets and investment analysis.

Mini-Lesson 10: Review and Practical Applications

- **Content:** Reviewing geometric concepts and their practical applications in various financial situations.

Week 12: Course Recap and Consolidation

Mini-Lesson 1: Recap of Basic Arithmetic in Finance

- **Content:** Reviewing key concepts from Week 1, emphasizing the application of basic arithmetic operations in financial contexts.

Mini-Lesson 2: Revisiting Percentages and Discounts

- **Content:** Summarizing lessons from Week 2, focusing on the calculation and significance of percentages in finance.

Mini-Lesson 3: Ratios and Proportions in Budgeting

- **Content:** Recapping the concepts of ratios and proportions from Week 3 and their role in effective budget management.

Mini-Lesson 4: Reflection on Simple Interest

- **Content:** Reviewing the principles of simple interest covered in Week 4 and their application in savings and loans.

Mini-Lesson 5: Compound Interest Concepts

- **Content:** Revisiting the critical concepts of compound interest from Week 5 and its long-term impact on finance.

Mini-Lesson 6: Understanding and Using Graphs

- **Content:** Summarizing Week 6's lessons on different types of financial graphs and their analytical use.

Mini-Lesson 7: Unit Price and Best Buy Calculations

- **Content:** Recapping Week 7's focus on calculating and comparing unit prices for smart shopping decisions.

Mini-Lesson 8: Exploring Financial Ratios and Measurements

- **Content:** Reflecting on the financial ratios and measurements discussed in Week 10 and their importance in personal finance.

Mini-Lesson 9: Geometry in Finance

- **Content:** Reviewing Week 11's integration of geometry with finance, highlighting how spatial concepts relate to financial planning.

Mini-Lesson 10: Comprehensive Course Review

- **Content:** A broad overview of all topics covered throughout the course, emphasizing how each concept interlinks and contributes to a solid foundation in financial literacy.

Mini-Lesson 11: Final Reflections and Future Learning

- **Content:** Encouraging students to reflect on their learning journey, discuss how they can apply these skills in real life, and explore further learning opportunities in finance and mathematics.

Mini-Lesson 12: Celebrating Achievements and Course Completion

- **Content:** Congratulating students on completing the course, discussing the importance of continual learning and growth in financial literacy.