

## **Retail Math for a Profit: How to Think Like a Buyer**

The *Retail Math for a Profit: How to Think Like a Buyer* topic is organized into three sections. Each section is divided into small Parts (courses) or segments of information in order that the student might build a strong background for understanding the next Part. The sections (courses) are sequential in order to assist the student in better understanding the next section and applying the retail math formulas to everyday merchandising activities.

### ***Section 1: Calculating Markup: A Merchandising Tool***

*(Section 1, Part 1): Mathematics for Profitable Merchandising*

- 1-1 Introduction
- 1-2 Terminology

*(Section 1, Part 2): Markup as a Merchandising Tool: Basic Merchandising Mathematics*

- 2-1 Basic Retail Pricing Components
- 2-2 Individual Markup and Gross Markup
- 2-3 Average Markups
- 2-4 Cumulative Markups
- 2-5 Initial Markups
- 2-6 Maintained Markups

*(Section 1, Part 3): Pricing Decisions*

- 3-1 Pricing Strategies
- 3-2 Pricing Types
- 3-3 Pricing Policies

*(Section 1, Part 4): Effective Markdown Techniques: Planning Markdowns*

- 4-1 Objectives of Markdowns
- 4-2 Types of Markdowns
- 4-3 Markdown Policies
- 4-4 Minimizing Markdowns
- 4-5 Calculating Markdowns

*(Section 1, Part 5): Review Problems and Quiz*

### ***Section 2: Manipulating Profit Variables: Merchandising for a Profit***

*(Section 2, Part 1): Mathematics for Manipulating Profit Variables*

- 1-1 Introduction
- 1-2 Terminology

*(Section 2, Part 2): Skeletal Profit and Loss Statement: Calculating the P & L Components*

- 2-1 Basic Components of the P & L Statement
- 2-2 Net Sales

- 2-3 Cost of Goods Sold
- 2-4 Gross Margin
- 2-5 Operating Expenses
- 2-6 Operating Profit
- 2-7 Interrelationships among Components
- 2-8 Four Variables Adjusted for Profit

(Section 2, Part 3): *Expanded Profit and Loss Statement: Calculating the P & L Components*

- 3-1 Gross Sales
- 3-2 Reductions
- 3-3 Total Costs of Goods Sold
- 3-4 Maintained Markup
- 3-5 Gross Margin
- 3-6 Contribution Margin
- 3-7 GMROI

(Section 2, Part 4): *Review Problems and Quiz*

### **Section 3: Preparing the Six Month Merchandise Plan**

(Section 3, Part 1): *Developing the Six Month Merchandise Plan*

- 1-1 Introduction (Three stages of Development)
- 1-2 Terminology

(Section 3, Part 2): *Pre-Planning Stage for Development of the Six Month Plan: The Environmental Scan*

- 2-1 Macro Trends Affecting Marketplace
- 2-2 The Target Consumer
- 2-3 The Buying-Selling Process

(Section 3, Part 3): *Collection of Numerical Data Information Stage for Development of the Six Month Plan*

- 3-1 Numerical Data for Existing Store
- 3-2 Happenings in Global Market
- 3-3 Weather Patterns, Sales Promotional Calendars

(Section 3, Part 4): *Calculation Stage for Development of the Six Month Plan*

- 4-1 Seven Step Procedure
  1. Planned Sales and Planned Reductions
  2. Planned Monthly Sales Distribution
  3. Planned Monthly Reductions Distribution
  4. Beginning of Month (BOM) Stock Each Month
  5. End of Month (EOM) Stock Each Month
  6. Planned Purchases
  7. Open-to-Buy or Planned Purchases at Cost
- 4-2 Turnover, Stock/Sales Ratio

(Section 3, Part 5): *Review Problems and Quiz*

**Section 1:** is *“Calculating Markup: A Merchandising Tool”*.

**Part 1 (1-1 and 1-2) of Section 1,** *“Mathematics for Profitable Merchandising”* provides background information and the basic markup terminology needed to build a retail math vocabulary.

**Part 2 (2-1 – 2-6)** *“Markup as a Merchandising Tool: Basic Merchandising Mathematics”* addresses the basic retail math price components and how they are utilized in calculating basic markup, individual markup, average markup, cumulative markup, initial markup, and maintained markup.

**Part 3 (3-1 – 3-3)** *“Pricing Decisions”* consists of information on how to make knowledgeable pricing decisions for a profitable retail store operation.

**Part 4 (4-1 – 4-5)** *“Effective Markdown Techniques: Planning Markdowns”* explains how to minimize markdowns and utilize markdowns as an effective merchandising tool.

Lastly, **Part 5** *“Review Problems and Quiz”* assists students in applying basic retail math formulas to solve problems which are found in day-to-day retail merchandising divisions at the retail store.

**Section 2:** *“Manipulating Profit Variables: Merchandising for a Profit”* explores not only Profit and Loss (P & L) Statements, both the Skeletal and Expanded Statement, but also four Profit Variables and Margins such as the Contribution Margin, Gross Margin and GMROI.

**Part 1 (1-1 – 1-2)** *“Mathematics for Manipulating Profit Variables”* explains basic terminology and background information for calculating the P & L Statement.

**Part 2 (2-1 – 2-8)** *“Skeletal Profit and Loss Statement: Calculating the P & L Components”* addresses the format, construction and calculation of the Skeletal P & L Statement. It examines the relationship of Net Sales, Cost of Goods Sold, Gross Margin, Operating Expenses and Operating Profit plus the interrelationships among the components. Additionally, Part 2 discusses how to adjust the four Profit Variables (i.e., retail price, sales volume, cost of goods sold, operating expenses) to increase store profit.

**Part 3 (3-1 – 3-7)** *“Expanded Profit and Loss Statement: Calculating the P & L Components”* expands information about the major components and provides added knowledge about the contents within those components:

- Gross Sales and Reductions provide a detailed explanation for the calculation of Net Sales.
- Total Cost of Goods Sold depicts the impact of transportation and insurance costs on the bottom line of cost of goods.

- Maintained Markup addresses the affect of alterations and cash discounts on Gross Margin.
- Direct and indirect operating expenses delineate the Contribution Margin as well as the impact of specific expense categories on the operating profit.

**Part 4** *“Review Problems and Quiz”* assists students in applying basic retail math formulas to solve problems which need to be addressed in day-to-day retail merchandising divisions of the retail store. It also assists the student in understanding better other daily operations of the store and the “whys” of the store’s merchandising policies.

**Section 3:** *“Preparing the Six Month Merchandise Plan”* provides step by step procedures, with needed formulas and additional information, for developing the Six Month Merchandise Plan.

**Part 1 (1-1 – 1-2)** *“Developing the Six Month Merchandise Plan”* provides terminology and background information to assist the student in understanding the formulas and calculations in **Part 4** of **Section 3**.

The three stages of the plan development are detailed in **Part 2**, **Part 3**, and **Part 4**:

**Part 2 (2-1 – 2-3)** *“Pre-Planning Stage for Development of Six Month Plan: Environmental Scan”*;

**Part 3 (3-1 – 3-3)** *“Collection of Numerical Data Information Stage for Development of the Six Month Plan”*; and,

**Part 4 (4-1 – 4-2)** *“Calculation Stage for Development of the Six Month Plan”*.

**Part 5** *“Review Problems and Quiz”* provides a review of the Six Month Merchandise Plan as well as numerous formulas and calculations presented throughout the entire course.