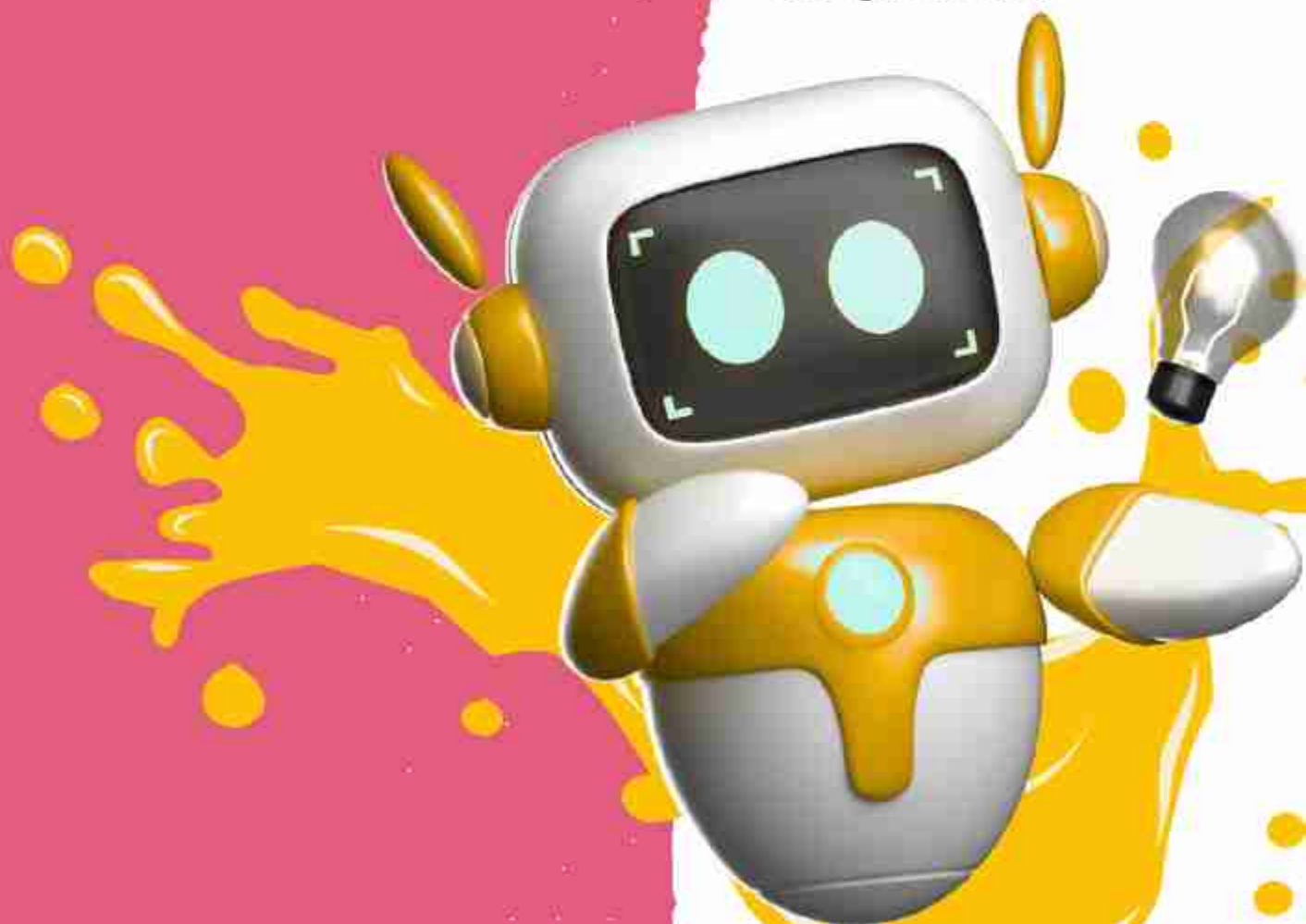


Maths Book



Welcome to a space where your imagination matters. This book is here to spark your ideas, sharpen your thinking, and help you bring your creative best to life. design isn't just about drawing—it's about how you see, think, and solve. So dream boldly, draw freely, and never stop creating. Let's get started!



CONTENT



1. Number System

- Introduction
- Classification of Numbers (Natural, Whole, Integers, etc.)
- Divisibility Rules and Prime Factorization (includes HCF & LCM)
- Important Formulas
- Tips, Tricks & Shortcuts
- Solved Examples
- Practice Questions (LOD-1, LOD-2, LOD-3)
- Miscellaneous Exercises



2. Squares and Cubes

- Introduction
- Understanding Perfect Squares and Cubes
- Expansion Formulas
- Tips, Tricks & Shortcuts
- Solved Examples
- Practice Questions (LOD-1, LOD-2, LOD-3)
- Miscellaneous Exercises



3. Ratio and Proportion

- Introduction
- Key Concepts: Ratio, Proportion, Continued Proportion
- Important Formulas
- Tips, Tricks & Shortcuts
- Solved Examples
- Practice Questions (LOD-1, LOD-2, LOD-3)
- Miscellaneous Exercises



4. Percentages

- Introduction: Understanding Proportions in Design and Business
- Key Concepts and Calculation Methods
- Important Formulas
- Creative Tips, Tricks & Shortcuts
- Solved Examples
- Practice Questions (LOD-1, LOD-2, LOD-3)
- Miscellaneous Exercises



5. Profit and Loss

- Introduction
- Key Concepts & Terminology
- Essential Formulas
- Tips, Tricks & Shortcuts
- Solved Examples
- Practice Questions (LOD-1, LOD-2, LOD-3)
- Miscellaneous Exercises



6. Simple and Compound Interest

- Introduction: Real-life Applications in Design and Business
- Fundamental Concepts: Principal, Rate, Time
- Difference Between Simple and Compound Interest
- Key Formulas and Their Derivations
- Enhanced Tips, Tricks & Shortcuts for Rapid Calculations
- Solved Examples
- Practice Questions (LOD-1, LOD-2, LOD-3)
- Miscellaneous Exercises



7. Time, Speed, and Distance

- Introduction: Relevance in Project Planning and Logistics
- Key Concepts and Terminologies
- Core Formulas and Their Applications
- Creative Tips, Tricks & Shortcuts
- Solved Examples
- Practice Questions (LOD-1, LOD-2, LOD-3)
- Miscellaneous Exercises



8. Time and Work

- Introduction: Managing Design Projects and Teamwork
- Key Concepts and Ratios
- Important Formulas
- Tips, Tricks & Shortcuts (e.g., combined work, individual rates)
- Solved Examples
- Practice Questions (LOD-1, LOD-2, LOD-3)
- Miscellaneous Exercises



9. Mixtures and Allegations

- Introduction: Application in Material and Color Mixing in Design
- Core Concepts and Methods
- Essential Formulas
- Enhanced Tips, Tricks & Shortcuts for Quick Analysis
- Solved Examples
- Practice Questions (LOD-1, LOD-2, LOD-3)
- Miscellaneous Exercises



10. Averages

- Introduction: Data Analysis in Design Projects
- Fundamental Concepts and Types of Averages
- Key Formulas
- Tips, Tricks & Shortcuts for Efficient Calculations
- Solved Examples
- Practice Questions (LOD-1, LOD-2, LOD-3)
- Miscellaneous Exercises



11. Linear Equations

- Introduction: Problem-Solving and Logical Reasoning
- Key Concepts and Techniques
- Essential Formulas and Methods of Solution
- Tips, Tricks & Shortcuts
- Solved Examples
- Practice Questions (LOD-1, LOD-2, LOD-3)
- Miscellaneous Exercises



12. Mensuration

- Introduction: Geometry in Design and Space Planning
- Fundamental Concepts and Measurements
- Key Formulas (area, volume, perimeter, etc.)
- Creative Tips, Tricks & Shortcuts (e.g., breakdown of complex shapes)
- Solved Examples
- Practice Questions (LOD-1, LOD-2, LOD-3)
- Miscellaneous Exercises

INTRODUCTION

Why Designers Need Math

UNDERSTAND PROPORTIONS

Essential for layout, symmetry, and visual balance.

THINK CRITICALLY

Boosts problem-solving in time-bound entrance exams.

BUDGET SMARTLY





Profit, loss, interest – math helps in managing your own design projects or businesses.

VISUALIZE DIMENSIONS

In fields like fashion, interior, or product design, accurate measurement = perfect execution.



Design Your Way to Success: Pro Tips

-  Use sticky notes for formulas in your study space.
-  Turn problems into short stories or visuals.
-  Practice with a peer—quiz each other visually.
-  Treat each topic like a design brief—your goal is to solve it creatively.