

CONTENTS

Preface vii

1. Mini-Tricks and Keyboard Puzzles 1

The Stretching Operation. The Stretching-Skipping Operation. The Universal Stretching and Stretching-Skipping Operations. The Four Pyramids. The Flip-Flop Numbers. The Self-Mending Numbers. The Sailing Fleet Puzzle. One, Two, Three . . . One Hundred. Forbidden Keys. The Talking Number Puzzle. How to Make Your Own Tricks and Puzzles. Answers.

2. Faster than the Calculator 22

Instantaneous Addition. Another Instantaneous Addition. And Another Fast Addition. Fast Multiplication. Another Fast Multiplication. Fast Division. Another Fast Division. The 109..989 Multiplication and Division. The Martian Money Puzzle.

3. Mystic Number 142857 39
The Stubborn Digits. The Stuck Calculator. The 142857 Addition. The 142857 Subtraction. The Hidden 142857 Addition and Subtraction. The 142857 Multiplication. The Magic-Digits Multiplication.
4. Playing Games 52
The One Hundred Game. The Martian Money Game. How to Play the Martian Money Game.
5. Pyramid Diversions 63
Climbing the First Number-Pyramid. Descending the First Number-Pyramid. Climbing the Second Number-Pyramid. Descending the Second Number-Pyramid. Climbing the Third Number-Pyramid. Descending the Third Number-Pyramid. Climbing and Descending the Fourth Number-Pyramid. Bridging the Pyramids. Flying the Numerical Magic Carpet.
6. Tricks that are Nice, Nasty, and Measured 81
 A. Nice Tricks (*to make friends*)
How to Demonstrate Someone's Super-

ior Mathematical Intuition. How to Demonstrate Someone's Outstanding Mathematical Creativity. How to Demonstrate Someone's Exquisite Mathematical Taste. How to Demonstrate Someone's Unique Mathematical Perception. How to Demonstrate Someone's Remarkable Mathematical Imagination.

B. Nasty Tricks (to make enemies)

How to Prove Someone's Zero Mathematical Ability. How to Prove Someone's Zero Mathematical Imagination. How to Prove that Someone has no Mathematical Taste. How to Prove Someone's Zero Mathematical Perception. How to Prove Someone's Zero Mathematical Intuition.

C. Measured Tricks (to do what you please)

How to Determine Someone's Hi Q. Another Way to Determine Someone's Hi Q. One More Way to Determine Someone's Hi Q. Other Methods for Determining Someone's Hi Q. How to Determine Husband's and Wife's Compatibility.

7. Magic Tricks

105

Which Hand? Where is the Ring? Tell the Numbers Thrown with Two Dice.

Identify Two Cards Drawn from a Deck. Identify Four Cards Drawn from a Deck. Identify Several Cards Drawn from a Deck. What is Your Age? When were You Born? Find the Secret Word. Find the Secret Hiding Place. Predicting the Difference of Two Numbers. What was the Number? Where are the Missing Digits? The Sealed Number. The Sealed Name. Adding the Invisible Numbers. Tell the Sum of Invisible Numbers.

8. Number Mysteries 133

The Stolen Numbers. Embezzlers and the Auditor. The Secret Product. The Treasury Agent and the Swiss Banker. The Taxpayer and the Tax Collector. The Detective and the Two Conspirators.

9. Cheerful Hodgepodge 152

Ali Baba Saves Princess Shahrazad. Long John Silver Finds Pirate Treasure. Robin Hood Saves Friar Tuck. The Three Musketeers and the Queen's Jewels. Snow White and the Seven Dwarfs. Sherlock Holmes and the Secret Message. The Secret Weapon of Agent 007.

10. Magician's Treasure Chest 174

Some Properties of 37. Some Properties of 77. Some Properties of 91. Some Properties of 99. Some Properties of 143. Some Properties of the "Calendar" Number 365. Some Properties of 999999. How to Generate Palindromic Numbers. Interesting Ways for Obtaining 1. Multiplication with Surprises. How to Obtain 101, 1001, etc. How to Obtain Numbers Containing Only the Digit 1. Some Useful Ways for Obtaining Powers of 10. Fancy Numbers.

Appendix	182
Bibliography	184
Index	186