

Finger Abacus Calculation Method - Briefing Report

1. Introduction

The Finger Abacus Calculation Method is a simplified mental math technique that uses fingers as a substitute for an abacus. Commonly used in Japan, China, and South Korea, this method teaches basic arithmetic and builds number sense and mental calculation skills without using tools or devices.

2. Basic Concept

Each finger represents a numerical value. By raising or tapping fingers, one can represent and compute numbers up to 99 or even 999 using hands alone.

3. Finger Assignments

A. Right Hand - Units (1s)

- Thumb = 5
- Index = 1
- Middle = 2
- Ring = 3
- Little = 4
- Max = 9

B. Left Hand - Tens (10s)

- Thumb = 50
- Index = 10
- Middle = 20
- Ring = 30
- Little = 40

- Max = 90

C. Imaginary/Second Set - Hundreds (100s)

- Thumb = 500
- Index = 100
- Middle = 200
- Ring = 300
- Little = 400
- Max = 900

4. Example Calculations

A. Representing 57:

- Left Hand (Tens): Thumb = 50
- Right Hand (Units): Thumb = 5 + Index = 1 + Middle = 1 -> Total = 7

B. Addition Example (23 + 15):

- 23: Left = 20 (middle), Right = 3 (index + middle)
- Add 15: Left = +10 (index), Right = +5 (thumb)
- Final = Left: 30, Right: 8 -> Total = 38

5. Educational Benefits

- Strengthens number sense
- Enhances mental arithmetic
- Encourages active learning
- Builds motor skills and memory

6. Classroom Application

- Best for Grades 1-5
- Can be used in drills, math games, and mental challenges
- Reinforces place value and math fluency

7. Limitations and Extensions

- Basic method is limited to 99
- Can be extended up to 999 with imagination
- Serves as a base for mental abacus/soroban methods

8. Visual Aids and Materials

- Posters and hand charts
- Practice worksheets
- Flashcards for drills

9. Conclusion

The Finger Abacus Method is an effective, interactive, and low-cost technique for teaching basic arithmetic. It engages multiple senses and supports modern math learning strategies.