

# Some Tricks of Solving Mathematics Problems by Vedic Mathematics

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## ABSTRACT

Vedic mathematics is a system to solve math problems in a faster and easy way. We can solve any difficult problem by using Vedic Math Tricks. Vedic Mathematics simplifies Arithmetic operations. Vedic Math-the ancient method of solving mathematics problems was later discovered by Shankaracharya Bharti Krishna Tirthji, who is known as the 'Father of Vedic Mathematics'. In this paper, the researcher tries to teach 6 Vedic Math Tricks. These Vedic Math Tricks prove to be really helpful to crack any competitive exams.

**Key Words:** Tricks, Vedic Maths

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## INTRODUCTION

In the Vedic system difficult problems or huge sums of multiplication, addition, subtraction, division etc. can often be solved immediately by the Vedic Tricks and formulae (sutras). Vedic Mathematics can definitely solve mathematical numerical calculations in faster way. Some Vedic math scholars mentioned that using Vedic maths tricks we can do calculations 10 – 15 times faster than our usual methods. Some of the methods are dependent on the specific numbers which are called specific methods.

It is a system of math techniques for doing math problems. This system is based on Veda, which is an ancient Indian teaching. In Vedic math classes, mathematics is not hard to learn and use. The technique can simplify arithmetic and even algebraic operations. Vedic math can help to improve the skill.

The fundamental operations of the study are Addition, Subtraction, Multiplication and Division. Mathematics education relies very heavily on the preparation of the teachers' understanding of Mathematics, of the nature of Mathematics and acquisition of pedagogic techniques. The present study tries to compare the effects of teaching methods i.e. Vedic methods and Traditional methods in learning the skills of arithmetic at standard VI. Some methods in Vedic Mathematics to improve the skills of Arithmetic such as Addition, Subtraction, Multiply and Division. The activities of Vedic method prepared for the present study can be exploited to be useful for all students. The study paves the way to improve the achievement in the skills of Arithmetic.

## METHODS

1) Squaring of a number whose unit digit is 5

Everyone one can quickly find the square of two digit number ending with 5.

For example:

Find  $(55)^2 = ?$

Step1:  $55 \times 55 = \text{----}25 (5 \times 5)$

Step 2:  $5 \times (5+1) = 30$

So the answer is 3025

$(55)^2 = 3025$

Another example:

Find  $(95)^2 = ?$

Step1:  $95 \times 95 = \text{----}25$

Step2:  $9 \times (9+1) = 90$

Therefore

$(95)^2 = 9025$

2) Multiply any two digit number by 11

Using Vedic Tricks, everyone can multiply within 2 seconds

For example:

$$32 \times 11 = 3 (3+2) 2 = 352$$

Other examples

$$52 \times 11 = 5 (5+2) 2 = 572$$

Similarly:

$$99 \times 11 = 9 (9+9) 9 = 9 (18) 9 = 1089 \text{ due to 1 is carry from 18 therefore } 9+1 = 10$$

$$\text{Hence } 99 \times 11 = 1089$$

Another example:

$$78 \times 11 = 7 (7+8) 8 = 7 (15) 8 = 858$$

3) Multiply a number by 5

**EVEN NUMBER**

For example:

$$2484 \times 5 = \text{---?}$$

$$\text{Step1: } 2484/2 = 1242$$

Step2: put 0

$$\text{The answer is } 2484 \times 5 = 12420$$

**ODD NUMBER**

For example:

$$3765 \times 5 = \text{-----?}$$

$$\text{Step1: } (3765-1)/2 = 1882$$

Step2: put 5 instead of 0

$$\text{The answer is } 3765 \times 5 = 18825$$

4) Subtraction from 100, 1000, 10000,-----

For example:

$$100 - 38$$

$$\text{Step1: } 9 - 3 = 6$$

$$\text{Step2: } 10 - 8 = 2$$

$$\text{Therefore } 100 - 38 = 62$$

$$1000 - 564 = ?$$

$$\text{Step1: } 9 - 5 = 4$$

$$\text{Step2: } 9 - 6 = 3$$

$$\text{Step3: } 10 - 4 = 6$$

$$\text{Therefore } 1000 - 564 = 436$$

5) Multiplication of any 2 digit number (from 11 to 19)

For example:

$$13 \times 15 = \text{-----?}$$

$$\text{Step1: } 15 + 3 = 18 \text{ (add the unit digit of smaller number to the larger Number)}$$

$$\text{Step2: } 18 \times 10 = 180 \text{ (multiply the result by 10)}$$

$$\text{Step3: } 3 \times 5 = 15 \text{ (multiply the unit digit of both the numbers)}$$

$$\text{Step4: add the two numbers, } 180 + 15 = 195$$

$$\text{Therefore } 13 \times 15 = 195$$

Another example:

$$\text{Multiply } 12 \times 18$$

$$\text{Step1: } 18 + 2 = 20$$

$$\text{Step2: } 20 \times 10 = 200$$

$$\text{Step3: } 2 \times 8 = 16$$

$$\text{Step4: } 200 + 16 = 216$$

$$\text{Hence } 12 \times 18 = 216$$

6) Dividing large number by 5

For example:

Divide 245 by 5

Step1: multiply the number by 2

$$245 \times 2 = 490$$

Step2) move the decimal or divide by 10

$$490/10 = 49.0 \text{ Or } 49$$

Therefore  $245/5 = 49$

Another example:

Divide 2129 by 5

Step1):  $2129 \times 2 = 4258$

Step2): move the decimal = 425.8

Hence  $2129/5 = 425.8$

### RESULT

So everyone will find a lot of Math problems that can be solved easily and quickly using these Vedic Math Tricks. These Tricks are useful in competitive exams to solve fast. It will take lesser time than conventional method.

### CONCLUSION

Vedic Math is easier to understand. Its methods are faster. Vedic Mathematics has general methods. By using Vedic Sutras, complicated and lengthy computations can be solved with greater accuracy and lesser time as compared to calculations based on conventional mathematics. It also improves memory.

### ACKNOWLEDMENT

The researcher would like to thank to Mr. Balveer Singh, Professor of Maths of Lords University CHIKANI, Alwar.

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