Magical Tips

Tip-1 How to find Square of a number ending with 5?

After learning this you will be able to find square of a number ending with 5 say 25, 35, 45 etc. You can even try to find square of a three digit number ending with 5 say 105, 115, 125 etc.

Say you want to find square of 85

Do the following:

- Multiply 5 by 5 and put 25 as your right part of the answer.
- Multiply 8 by the next higher digit i.e 9 and put 72 as your left part of the answer.
- Your answer is 7225

You can use this formula to find square of any number ending with 5.

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was started in year 2000 to promote the concept of Vedic Mathematics

Tip-2 How to find out square of an adjacent number?

You know the squares of 30, 40, 50, 60 etc. but if you are required to calculate square of 31 or say 61 then you will scribble on paper and try to answer the question.

Can it be done mentally?

Some of you will say may be and some of you will say may not be. But if I give you a formula then all of you will say, yes! it can be.

What is that *formula…..*

The formula is simple and the application is simpler.

Say you know $60^2 = 3600$

Then 61^2 will be given by the following

$61^2 = 60^2 + (60+61) = 3600 + 121 = 3721$

or Say you know $25^2 = 625$ then

$26^2 = 625+ (25+26) = 676$

Magical Methods was started by Mr. Pradeep Kumar an alumnus of IIM Bangalore with three other friends who also are alumnus of IIM Bangalore and Lucknow.

Like above, you can find out square of a number that is one less than the number whose square is known.

Let me show it by taking an example:

Say you know $60^2 = 3600$

Then 59^2 will be given by the following

$59^2 = 60^2 - (60+59) = 3600 - 119 = 3481$

or Say you know $25^2 = 625$ then

$24^2 = 625- (25+24) = 576$

Apply it to find square of a digit, which is one, less than the square of a known digit. This works very well for the complete range of numbers.

Mr. Pradeep Kumar has written several books on Vedic Mathematics. He holds more than 70 copyrights and 15 patents.

<u>Tip-3</u> How to find out square of a number near 100?

Numbers Less than 100

Say you want to find Square of 98.

98 is 2 away from 100. So what?

The square will be given by $98\text{-}2/02^2 = 9604$

Say you want to find Square of 97

97 is 3 away from 100.

Square of this will be given by $97\text{-}3/03^2 = 9409$

Mr. Pradeep Kumar is on the Expert Panel of Times of India and Hindustan Times.

Numbers More than 100.

Say you want to find square of 102

102 is 2 away from 100, its 2 more than 100 therefore we will add 2 more to it and the square will be given by

$102\text{+}2/\ 02^2 = 10404$

After going through these three examples you should be able to understand the technique. The technique is to reduce or add as much as it is away from 100 and put square of difference on it.

Mr. Pradeep Kumar has developed **Math-Carrom** for Teaching Mathematics Through Games

Tip-4 Multiplication

The First Formula

To Multiply two digit numbers:
Remember:
1. The digits on the left hand should be same.
2. On adding the right hand digits you must get 10.

Example:
65 x 65 or 36 x 34

The Magical Method:
65 x 65 = 4225

What did we do?

1. We first multiplied the right hand side digits (5 x 5) and wrote 25.
2. We added 1 to the left digit 6 and got 7.
3. We then multiplied 6 by 7 and wrote the answer 42 to the left of 25.
4. We thus arrived at the answer 4225.

Let's try another example:
46 x 44
1. 6 x 4 = 24
2. 4 + 1 = 5
3. 4 x 5 = 20
4. Answer: 2024

Note:
What if we have to multiply 69 x 61?
The answer would be 4209.

But why the extra 0?
Because the right hand side of the answer should always
have two digits.

Mr. Pradeep Kumar teaches Advance Intelligent Guessing at his New Delhi centre. You can Call at

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Tip-4 Divisibility

I am going to describe divisibility of a number by 13. In
schools and coaching institutes students are taught
divisibility of a number by 2, 3, 4, 5, 6, 8, 9 and 11. I
hope you are all aware of this.

A number will be divisible by 2, if it is an even number. A
number will be divisible by 3, if sum of the digits is
divisible by 3 and so on and so fourth... But what about 7,
13, 17, 19 and other odd numbers?

Our contemporary mathematics is silent on this. In Vedic we
have solutions for all these (surprised?)

Let me introduce 13. [Operator of 13 is 4 How?**]

Find whether 1001 is divisible by 13?

By seeing it is difficult to say.

Do the following operations:

1001= 100+1(last digit)*4(operator)= 104= 10+ 4 (last digit)*4(operator)=26

Since 26 is divisible by 13 therefore, 1001 is divisible by 13.

What have we done here?

We separated the last digit of the number, multiplied it by the operator and added the result to the rest.

Magical Methods Online offers Six Short Courses and Two Long Courses on Vedic Mathematics