Special Report…

How To Unleash Your Natural Ability For Mental Math By Discovering The "Secret Mathematician" Hidden Deep Within You

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Introduction

This may surprise you.

You may even find it hard to believe at first.

But you already ARE a mathematical genius.

You see, many times each day, your brain performs awesome feats of mathematical genius:

When you cross the road, when you catch a ball, when you avoid bumping into people on a busy street…

… these are just a few simple examples of how your brain constantly *calculates*… *measures*… *estimates*… *recalculates*… at truly phenomenal speeds.

So with the incredible *natural* computing power at our disposal, why do many people find basic arithmetic so difficult? Why do they automatically reach for a calculator when they see "15 x 7"?

In this report, you're going to learn what has held you back in mental math. And more importantly -- how to start overcoming these "disabilities" immediately.

Why You've Been Held Back In The Mental Math Class

There are three reasons you feel "blocked" when it comes to mental math:

- Conditioning
- Technique
- Memory

Let's look at these one by one:

Conditioning

Ever since the electronic calculator first appeared -- and particularly after it was introduced into the classroom -- we have all become conditioned to reach for the electronic wizard anytime we're confronted with a math problem – no matter how simple the problem may be.

So deeply ingrained is this habit that many people (wrongly) believe they are unable to do any calculations in their head. Or when they do work something out, they pick up the calculator "just to check it".

While calculators are extremely useful (even mathematicians use them!) you'll find that most of the sums you encounter in daily life can easily be done in your head.

All it takes is the right know-how, combined with a little practice. That's what this course will give you plenty of.

Technique

You were taught to calculate from right to left, weren't you? Starting at the right hand side and work backwards. This is a very unnatural way of calculating.

Calculating from *left* to *right* is easier and more natural, because you read, write, and pronounce numbers from the left. This makes mental calculations much simpler.

It's also easier when *estimating* something – when you only want to obtain the most significant figures in a calculation. For example, if you are multiplying a 6-figure number and you only want the first 3 figures of the answer it is a waste of time and effort to calculate the whole sum, which you would have to do in calculating the usual way from right to left.

Now, because the usual methods of multiplication, addition and subtraction work from right to left, it will be necessary for you to learn the alternative strategy of calculating from left to right. Once this is mastered however you will find that calculating from the left is far easier and more natural.

Memory

If you attempted to perform the cumbersome Western methods of calculation in your head, you would quickly feel overwhelmed trying to remember all the workings out.

In contrast, the ancient Vedics devised a delightfully simple method called "*On The Flag*".

"The Flag" is a part of your mind you use to store very short-term information, like an interim result.

The beauty of it is you only have to remember one thing at a time. You hold the first part of the answer in mind and build it up step-by-step, from left to right, until it is complete.

This makes mental calculation **much** simpler!

You'll learn exactly how to this in the following worked examples, so you'll see exactly how it all fits together.

Ready? Here goes…

1 Suppose we want to multiply 234 by 2 from left to right:

```
  2 3 4
    2   ×
  4 6 8   this is easy!
```

We get: 4 then 6 then 8.

2 Now if we had 237 × 2:

```
  2 3 7
    2   ×
  4 7 4
```

The products we get when we multiply 2,3,7 each by 2 (from left to right) are 4,6,14, and here the 6 and the 1 are merged together as indicated by the curved line, to give 474 as the answer.

The 3 mental steps carried out, corresponding to multiplying each of the 3 figures by 2 are:

step 1 4
step 2 4,6 = 46
step 3 46,14 = 474.

This way of describing the steps in a sum will be used throughout.

The first part of the answer is held in the mind (On the Flag) and is built up digit by digit until the answer is complete.

In summary: If a single figure is to be combined with what is in memory (as in step 2 above) it is simply tagged on the end; if a double figure is to be combined (as in step 3 above) the left-hand digit is added to the number in memory and the right-hand digit is then tagged on the end. It is really very simple.

3 For 236 × 7:

```
  2 3 6
    7   ×
  1 6 5 2
```

The mental steps are:

14
14,21 = 161
161,42 = 1652

4 > 4321 × 6 = 25926 The mental steps are: 24

24,18 = 258

258,12 = 2592

2592,6 = 25926

5 > In multiplying 56 by 7: we get 35 (5×7), then 42 (6×7).

The 4 here is then added to the 35 to give 39 and the 2 is tagged on the end to give 392 as the answer.

You will find this simple technique easy and efficient, but you will need to practice it. The following exercise will help to establish the method.

After some practice with the sum in front of you, you may like to try solving it after only a brief look at the sum.

Practice A

1. 27 × 3 =
2. 72 × 7 =
3. 26 × 6 =
4. 76 × 6 =
5. 78 × 9 =
6. 642 × 4 =
7. 256 × 3 =
8. 1059 × 7 =
9. 741 × 3 =
10. 223 × 9 =

11. Find 321 × 21 (a) by multiplying by 3 and then by 7,
(b) by multiplying 3,2,1 each by 21.

With practice you will find that the sums get easier. You will also find that your memory is strengthened and your mental agility is increased. But do not strain your mind, this will produce an adverse effect; the least force used in solving the sums the better.

ADDITION FROM LEFT TO RIGHT

This is just the same as multiplying from left to right.

6 Add 187 and 444.

We add up in each column from left to right, and merge the totals together:

```
1  8  7          The mental steps are:   5
4  4  4  +                                5,12 = 62
6  3  1                                   62,11 = 631
```

7 If we have to add the numbers 45 and 78, we may think of the numbers one below the other. The total in the first column is 11, and the second column totals 13. The 1 in the 13 is then combined with the 11 to give 12 and the 3 is tagged on to this: 123. (11,13 = 123)

Addition of numbers is in frequent demand and this method will be found easy and fast once we have formed the habit of calculating from left to right through practice.

Practice B

1. 5 6 6 7 + ____	2. 8 8 3 3 + ____	3. 4 5 6 7 + ____	4. 5 4 6 4 + ____	5. 3 9 4 9 + ____
6. 3 6 3 4 5 6 + _____	7. 8 1 9 9 1 8 + _____	8. 7 7 7 4 4 4 + _____	9. 7 3 7 1 3 9 + _____	10. 3 4 5 6 7 8 + _____

This can of course be extended to the addition of longer numbers or to adding three or more numbers together, but since we are mostly unaccustomed to holding many figures in the head at once we will not take this any further here.

WRITING LEFT TO RIGHT CALCULATIONS

If you are working on paper, rather than mentally, the following procedure is probably the best.

8

```
  8 7
    4 ×
  2
-------
3 4 8
```

First we multiply the 8 by 4 to get 32.
The 3 is written in the answer and the 2 is put *On the Flag* in the next column.
Then 7×4 = 28, and the flagged 2 is combined with this 28 to give 48 (i.e. the flagged 2 counts as 20) and 48 is put down to complete the answer.

9

```
    8 7 6 1 4
            3 ×
  4 1 8 3
-----------
2 6 2 8 4 2
```

Starting on the left 8×3 = 24: we put the 2 down as the first figure of the answer, and put the 4 *On the Flag* in the next column.
Then 7×3 = 21: 21 + flagged 4 (as 40) = 61. Put down 6, flag 1.
6×3 = 18: 18 + flagged 1 (as 10) = 28. Put down 2, flag 8.
1×3 = 3: 3 + flagged 8 (as 80) = 83. Put down 8, flag 3.
4×3 = 12: 12 + flagged 3 (as 30) = 42. Put down 42.

Alternatively the flagged numbers can be committed to memory rather than written down.

10

```
  5 6 7 8
  2 4 6 8 +
  7 0 3
---------
0 8 1 4 6
```

In this addition sum we first get 5 + 2 = 7 and put down 0 in the answer and flag the 7. (The 0 can of course be left out).
6+4=10: 10+flagged 7=80. Put 8, flag 0.
7+6=13: 13+ flagged 0=13. Put 1, flag 3.
8+8=16: 16+ flagged 3=46. Put down 46.

Practice C

1. 4 5 6 × 3 =	2. 2 2 8 × 6 =	3. 5 3 1 × 6 =	4. 2 3 4 × 7 =	5. 9 5 9 × 9 =	6. 8 6 3 1 × 4 =
7. 4 9 + 8 6 =	8. 8 6 3 + 3 6 8 =	9. 9 5 9 + 1 2 3 =	10. 1 8 2 + 7 7 7 =	11. 4 5 6 7 + 7 7 7 7 =	12. 7 7 7 7 + 2 4 2 6 =

Conclusion

You've just learned a simple method of calculating that mirrors the way your mind naturally works.

Try to practice this doing similar calculations for a few minutes every day.

In time, you will find that the techniques become so natural that you start seeing the answers to math problems almost instantly and with little effort.