MATHEMATICS TRICKS:

Age Calculation Tricks:

Step1: Multiply the first number of the age by 5. (If <10, ex 5, consider it as 05. If it is >100, ex: 102, then take 10 as the first digit, 2 as the second one.)
Step2: Add 3 to the result.
Step3: Double the answer.
Step4: Add the second digit of the number with the result.
Step5: Subtract 6 from it.

Phone Number trick:

Step1: Grab a calculator (You wont be able to do this one in your head) .
Step2: Key in the first three digits of your phone number (NOT the area code-if your number is 01-123-4567, the 1st 3 digits are 123).
Step3: Multiply by 80.
Step4: Add 1.
Step5: Multiply by 250.
Step6: Add the last 3 digits of your phone number with a 0 at the end as one number
step7: Repeat step 6
step8: Subtract 250
step9: Divide number by 20

Answer: The 3 digits of your phone number

Funny Trick That results on your exact phone number!!

Missing digit Trick:

Step1: Choose a large number of six or seven digits.
Step2: Take the sum of digits.
Step3: Subtract sum of digits from any number chosen.
Step4: Mix up the digits of resulting number.
Step5: Add 25 to it.
Step6: Cross out any one digit except zero.
step7: Tell the sum of the digits. Subtract the sum of the digits from 25.

Answer: Inorder to find out the missing digit, subtract the sum of digits from 25. The difference is the missing digit.

Birthday magic:

Step1: Add 18 to your birth month.
Step2: Multiply by 25.
Step3: Subtract 333.
Step4: Multiply by 8.
step5: Subtract 554.
step6: Divide by 2.
step7: Add your birth date.
step8: Multiply by 5.
step9: Add 692.
step10: Multiply by 20.
step11: Add only the last two digits of your birth year.
step12: Subtract 32940 to get your birthday!.

Example: If the answer is 123199 means that you were born on December 31, 1999. If the answer is not right, you followed the directions incorrectly or lied about your birthday.

Consecutive number trick:

Step1: Pick any 5 consecutive numbers between ten and one hundred. Let's say your friend picks 51, 52, 53, 54, and 55.
Step2: Find the middle number, (call it the median). In your case, the median is 53.
Step3: Multiply it by ten (just add a zero to the median). eg. 53 X 10 = 530.
Step4: Divide (/) by 2. eg. 530 / 2 = 265.

Answer: That number is the answer -- the same as if we did the sum.

Number Trick For Fun:

Step1: Think of a number from 1 to 10
Step2: Multiply it by 9.
Step3: Add the digits together.
step4: Subtract 5 from result of step3.
step5: Find the letter of the alphabet which corresponds to your number (1 = A, 2 = B, ...)
step6: Think of a country that starts with that letter.
step7: Think of an animal that starts with the last letter of your country.
step8: Think of a color that starts with the last letter of your animal.

Answer: It will always be an orange kangaroo in Denmark.

2's trick:

Step1: Think of a number .
Step2: Multiply it by 3.
Step3: Add 6 with the getting result.

Step4: divide it by 3.
Step5: Subtract it from the first number used.

Answer:2

Any Number:
Step1: Think of any number.
Step2: Double the number.
Step3: Add 9 with result.
Step4: sub 3 with the result.
Step5: Divide the result by 2.
Step6: Subtract the number with the number with first number started with.

Answer: 3

Any three digit Number:
Step1: Add 7 to it.
Step2: Multiply the number with 2.
Step3: subtract 4 with the result.
Step4: Divide the result by 2.
Step5: Subtract it from the number started with.

Answer: 5

Number below 10:
Step1: Think of a number below 10.
Step2: Double the number you have thought.
Step3: Add 6 with the getting result.
Step4: Half the answer, that is divide it by 2.
Step5: Take away the number you have thought from the answer, that is, subtract the answer from the number you have thought.

Answer: 3

Any Number:
Step1: Think of any number.
Step2: Subtract the number you have thought with 1.
Step3: Multiply the result with 3.
Step4: Add 12 with the result.
Step5: Divide the answer by 3.
Step6: Add 5 with the answer.

Step7: Take away the number you have thought from the answer, that is, subtract the answer from the number you have thought.

Answer: 8

Any Number:
Step1: Think of any number.
Step2: Multiply the number you have thought with 3.
Step3: Add 45 with the result.
Step4: Double the result.
Step5: Divide the answer by 6.
Step6: Take away the number you have thought from the answer, that is, subtract the answer from the number you have thought.

Answer: 15

Same 3 Digit Number:
Step1: Think of any 3 digit number, but each of the digits must be the same as. Ex: 333, 666.
Step2: Add up the digits.
Step3: Divide the 3 digit number with the digits added up.

Answer: 37

---

2 Single Digit Numbers:
Step1: Think of 2 single digit numbers.
Step2: Take any one of the number among them and double it.
Step3: Add 5 with the result.
Step4: Multiply the result with 5.
Step5: Add the second number to the answer.
Step6: Subtract the answer with 4.
Step7: Subtract the answer again with 21.

Answer: 2 Single Digit Numbers.

1, 2, 4, 5, 7, 8 Trick:
Step1: Choose a number from 1 to 6.
Step2: Multiply the number with 9.
Step3: Multiply the result with 111.
Step4: Multiply the result by 1001.
Step5: Divide the answer by 7.

Answer: All the above numbers will be present.

1089 Trick:

Step1: Think of a 3 digit number.
Step2: Arrange the number in descending order.
Step3: Reverse the number and subtract it with the result.
Step4: Remember it and reverse the answer mentally.
Step5: Add it with the result, you have got.

Answer: 1089

---

x7x11x13 Trick :

Step1: Think of a 3 digit number.
Step2: Multiply it with x7x11x13.

Ex: Number: 456, Answer: 456456

---

x3x7x13x37 Trick :

Step1: Think of a 2 digit number.
Step2: Multiply it with x3x7x13x37.

Ex: Number: 45, Answer: 454545

9091:

Step1: Think of a 5 digit number.
Step2: Multiply it with 11.
Step3: Multiply it with 9091.

Ex: Number: 12345, Answer: 1234512345

---

2 Digit Number which ends in 5:

Step1: Multiply the first digit of number, with the next to its number. Ex: 35 is the number you want to square. 3 x 4 = 12
Step2: Finally add 25 at the end of the result.

Answer: 1225

Any 2 Digit Number:

Ex: 47
Step1: Look for the nearest 10 boundary.
3 from 47 to 50
Step2: Since we went up 3 to 50, now go down 3 from 47 to 44.
Step3: Now mentally multiply 44 x 50 = 2200 - 1st answer.

Step4: 47 is 3 away from the 10 boundary 50, Square 3 as 9 - 2nd answer.
Step5: Add the first and second answer, 2200 + 9

Answer: 2209

Amazing Prime Numbers:

There are few amazing prime numbers, which are unbelievable. Here are some funny math interesting facts of prime numbers. Enjoy the Facts.

Amazing Prime Numbers

Here are few amazing prime numbers, these prime numbers were proved by the XVIIIth century.

31
331
3331
33331
333331
3333331
33333331

The next number 333333331 is not a prime number. Whereas it is multiplied by 17 x 19607843 = 333333331.

Names for Powers of 10:

Know the names of the Power 10 which is really amazing. Enjoy the Interesting Facts of numbers list.

Values	Zero's	Names
10^0	0	One
10^1	1	Ten
10^2	2	Hundred
10^3	3	Thousand
10^4	4	Myriad
10^6	6	Million
10^9	9	Billion
10^{12}	12	Trillion
10^{15}	15	Quadrillion
10^{18}	18	Quintillion
10^{21}	21	Sextillion
10^{24}	24	Septillion
10^{27}	27	Octillion
10^{30}	30	Nonillion
10^{33}	33	Decillion
10^{36}	36	Undecillion

10^{39}	39	Duodecillion
10^{42}	42	Tredecillion
10^{45}	45	Quattuordecillion
10^{48}	48	Quindecillion
10^{51}	51	Sexdecillion
10^{54}	54	Septdecillion / Septendecillion
10^{57}	57	Octodecillion
10^{60}	60	Nondecillion / Novemdecillion
10^{63}	63	Vigintillion
10^{66}	66	Unvigintillion
10^{69}	69	Duovigintillion
10^{72}	72	Trevigintillion
10^{75}	75	Quattuorvigintillion
10^{78}	78	Quinvigintillion
10^{81}	81	Sexvigintillion
10^{84}	84	Septenvigintillion
10^{87}	87	Octovigintillion
10^{90}	90	Novemvigintillionn
10^{93}	93	Trigintillion
10^{96}	96	Untrigintillion
10^{99}	99	Duotrigintillion
10^{100}	100	Googol
10^{102}	102	Trestrigintillion
10^{120}	120	Novemtrigintillion
10^{123}	123	Quadragintillion
10^{138}	138	Quinto-Quadragintillion
10^{153}	153	Quinquagintillion
10^{180}	180	Novemquinquagintillion
10^{183}	183	Sexagintillion
10^{213}	213	Septuagintillion
10^{240}	240	Novemseptuagintillion
10^{243}	243	Octogintillion
10^{261}	261	Sexoctogintillion
10^{273}	273	Nonagintillion
10^{300}	300	Novemnonagintillion
10^{303}	303	Centillion
10^{309}	309	Duocentillion
10^{312}	312	Trescentillion
10^{351}	351	Centumsedecillion
10^{366}	366	Primo-Vigesimo-Centillion
10^{402}	402	Trestrigintacentillion
10^{603}	603	Ducentillion
10^{624}	624	Septenducentillion

10^{903}	903	Trecentillion
10^{2421}	2421	Sexoctingentillion
10^{3003}	3003	Millillion
$10^{3000003}$	3000003	Milli-Millillion

This is a funny interesting part of maths. Know about the names for powers of 10. Enjoy it with Fun!

Number 2519:

It is an interesting number. Here are some funny math interesting facts about this number 2519. Enjoy the Facts.

2519 Mod n means the reminder of 2519/n, here / is the integer division.

2519 Mod n

2519 Mod 2 = 1
2519 Mod 3 = 2
2519 Mod 4 = 3
2519 Mod 5 = 4
2519 Mod 6 = 5
2519 Mod 7 = 6
2519 Mod 8 = 7
2519 Mod 9 = 8
2519 Mod 10 = 9

Sequential Numbers with 2519

1259 x 2 + 1 = 2519
839 x 3 + 2 = 2519
629 x 4 + 3 = 2519
503 x 5 + 4 = 2519
419 x 6 + 5 = 2519
359 x 7 + 6 = 2519
314 x 8 + 7 = 2519
279 x 9 + 8 = 2519
251 x 10 + 9 = 2519

Quick Square:

Step1: If you need to square a 2 digit number ending in 5, you can do so very easily with this trick.
Step2: Mulitply the first digit by itself + 1, and put 25 on the end.
Step3:That is all!
Step4: Ex:25 ie(2*(2+1))&25

Answer:625

Multiply by 5:

Step1: Take any number, then divide it by 2
Step2:If the result is whole, add a 0 at the end.
Step3: If it is not, ignore the remainder and add a 5 at the end.
Step4: 2682 x 5 = (2682 / 2) & 5 or 0
Step5:2682 / 2 = 1341 (whole number so add 0)
Step6: Ans:13410
Step7: Letâ€™s try another:5887 x 5,2943.5 (fractional numbers (ignore remainder, add 5)

Answer: 29435

Tough Multiplication:

Step1: If you have a large number to multiply and one of the numbers is even, you can easily subdivide to get to the answer
Step2:Ex:32 x 125, is the same as: 16 x 250 is the same as: 8 x 500 is the same as: 4 x 1000 = 4,000

Subtracting from 1,000:

Step1:To subtract a large number from 1,000 you can use this basic rule: subtract all but the last number from 9, then subtract the last number from 10:
Step2:Ex:1000-648
Step3: subtract 6 from 9 = 3
Step4: subtract 4 from 9 = 5
step5: subtract 8 from 10 = 2

Answer: 352

Mental Math Tricks to Impress Your Friends:

One thing that fascinates me is performing mental math. Being able to quickly perform additions, subtraction, multiplications etc is a good way to impress your friends. The problem is, I'm not a math genius, and I don't know much behind simple arithmetic.

If you're anything like me, but you'd still like to learn some basic math tricks, I hope you'll find this list useful.

Simple tricks

How to multiply any two digits number by 11

Let's say that you want to find the product of 36 and 11. One way to find it would be to multiply 36 by 10 and then add 36 on the result. There is, however, a simple trick that'll do the job for any two digits number. To find out the result, write the first digit followed by the addition of the first and second digit, followed by the second digit.

Example:

What happens if the sum of the two numbers is bigger than 9? In this case you add 1 to the first number, followed by the last digit of the addition of the two numbers, and then again you add the second number

Square any two digits number that ends with 5

Calculating the square of a number below 100 is extremely simple. If you want to find the square of 25 for example, you simply have to take the first digit (2), multiply it for the next higher number (3), and then add 25 to the result.

Multiply any two digits numbers with the same first digit and the second digit that sums up to 10

Let's say that you want to multiply 42 and 48 together. Notice that they both start with 4, and that the sum of their second digit is 10. In this case there's a simple rule that you can use to find their product. Simply multiply the first digit (4) for the next higher number (5) and then append the product of their second digits.

Note that if the product of the second digits is below ten, you have to add a 0 in front of it.

Multiply by 9

To multiply by 9, simply multiply by 10 and then subtract the number itself.

Quickly find percentages

- To find out the 15% of a number, divide it by 10 and the add half of it.
- To find out the 20% of a number, divide it by 10 and multiply the result by two.
- To find out the 5% of a number, divide it by 10 and the divide it by two.

Addition

When we were at school, we have been taught how to sum two or more numbers together by using the right to left approach. With this method, you first sum the decimal part of the number, then you move to the hundreds and so on. This works good on paper, but it's a pain when you're doing mental calculations. Fortunately, the solution is very easy.

Left to right approach

Instead of using a right to left approach, we can start from the left and move to the right. Take the following example:

Usually, you would first sum up 4 to 45, and then and 30 to the result. But by using the left to right approach, you first sum up 30 to 45, and then you add 4 to the result. Although this example is very simple, you'll see the advantages of this method as you start to use it. If you're working with three digits numbers, the process is the same

This example is a bit more complicated than the previous one, yet it's very easy to solve using the left to right approach. You first start by adding 600 to 459, which results in 1059. Now the problem is simplified to 1049 + 37. You simplify it even further by adding 30 to 1049, and then you finally add 7 to the result.

Subtraction

Like with addition, you can use the left to right approach for subtracting to numbers together. This time, however, it may feel uncomfortable to keep track of borrowings (a borrowing occurs when you subtract a number to a bigger one, like 16 – 9). Let's see an example of this.

In this case, you first start by subtracting 10 to 64, resulting in 54, and now you only have to subtract 7 to 54. You can, however, subtract 20 to 64 and add 3 to the result. This way you don't have to worry about borrowings.

Using complements to simplify subtractions even more

There is a way to easily calculate 3 or 4 digits subtractions very quickly in your head. This technique makes use of complements. For example. let's say that you're facing the following problem:

Instead of following the standard left to right approach, you could solve this problem by subtracting 400 to 674 and then add 42 back to the result. 42 is the difference from 100 and 58. A good question is: how do you find 42?

Note that there's a simple pattern for calculating the second number. In particular, the sum of the first digits always sum up to 9, and the sum of the second digits always sum up to 10. The only exception is when the number ends with 0, which is simpler.You can use this technique to solve any subtraction very easily.

Multiplication

In order to solve simple multiplications, it's helps a lot being comfortable with the multiplication table for numbers below 10.

As you may have already guessed, we're going to use the left to right approach to solve simple multiplication very easily. Take the following example:We can reduce it by first calculating 30 × 7 (which is like 3 × 7 plus a 0) and then add 6 × 7 on the result.This approach can be used for even larger numbers. Note that you can also round up instead of rounding down:

User contributions:

the following are some math tricks contributed by the users.

Multiply by 5

Contributed by Scott.

To multiply 5 simply cut the # in half then multiply by 10.

eg. 17*5
1/2 of 17 = 8.5
8.5 * 10 = 85

Multiply numbers with multiple digits

Contributed by Tom Peterson

Use this trick when multiplying numbers with multiple digits

let {a;b;c;d…} represent digits of a number

ab x cd = (axc), (axd + bxc), (bxd)

the commas represent separation of digits, so “axc” represents the digit in the hundreds place, etc.

eg) 23 × 14 = (2×1), (2×4 + 3×1), (3×4)
8 + 3
= 2,11,12

in the event of double digits in the same digit place, the number in the digit’s place (starting with the unit’s place) carries the ten’s place digit of the digit place to the following digit place [what a mouthful!]

like in this instance

= 2, 11, 12 = 2, 12, 2 = 3, 2, 2
the answer is 322

the theory behind this is the “distribution property” of numbers commonly used with equations like (x + 1)(x + 4)=0 to make x^2 + 5x + 4=0

the same principles can be applied with 3 digit numbers as well

abc x def = (axd),(axe+bxd),(axf+bxe+cxd),(bxf+cxe),(cxf)

for multiplying 2 digit with 3 digit numbers, just use the 3×3 digits method but use a zero in the hundreds place of the 2 digit number

Square a number close to 10^2

Contributed by Prerak

Vedic mathematics provides lots of short cuts like shown here.

e.g.-
If you need to square a number close to 10^n, you can do so easily. Like if you want 92^2, lets take its answer as *abcd*.
Now, 92 is 8 before 100, so subtract 8 from 92, i.e. you get *ab* as 84. For finding *cd*, square 8 i.e. 64.
Hence the square of 92 comes as 8464.

For square of 87, let the answer is *abcd* again. Here 87 is 13 short of 100, so subtract 13 from 87 You get 74 as *ab*. For finding *cd*, square 13 i.e. 169. Since *cd* is only of two digits, add this extra 1 to *ab*.
So the answer becomes 7569.

Square two digits ending with 5

Contributed by alwayslovely

To square 2 digit numbers ending with '5' eg 75 × 75
1. The answer will end with '25'
2. Take the first digit '7' multiply by the number after '7' => 7 × 8 = 56

75 × 75 = 5625

Test it out with 95 × 95.
Did you get 8125?

Squaring any number

Contributed by joe

take any number and find out how much to add to get it to the nearest tens subract and add that number to the orignal number multiply add the square

example:

(999+1) (999-1) + (1^2)
(998) (1000) + 1
999^2 + 998001

Squaring a number

Contributed by Ryan

A math trick I noticed when I was young. If you are squaring a number it is always equal to the total of the number times 2 subtract one of the previous squared number. This is helpful if you dont want to write it out. For instance most people know that 10×10=100 or 11×11=121 even 12×12=144 so lets say you dont know 13×13. Its equal to (13×2)-1(plus the previous squared number which was 12×12)144=169

Squaring two digit numbers

Contributed by Shyju

Suppose AB is the number,
Then arrange the number as follows,

A*A|2*A*B|B*B

(if A*A or A*B is one digit add 0 prior to that – eg: 4 should be written as 04, 5 should be 05 etc..)

Take a number : 35

09|30|25 (3*3 | double of 3*5 | 5*5)

From right to left, keep the right most number as it is and add the number coming both side of | symbol.

ie. Keep 5 as it is, add 2+0, add 3+9

1225

Take another example 43
16|24|09 = 1849

Multiply Up to 20X20 In Your Head

In just FIVE minutes you should learn to quickly multiply up to 20x20 in your head. With this trick, you will be able to multiply any two numbers from 11 to 19 in your head quickly, without the use of a calculator. I will assume that you know your multiplication table reasonably well up to 10x10.

Try this:

- Take 15 x 13 for an example.
- Always place the larger number of the two on top in your mind.
- Then draw the shape of Africa mentally so it covers the 15 and the 3 from the 13 below. Those covered numbers are all you need.
- First add 15 + 3 = 18
- Add a zero behind it (multiply by 10) to get 180.
- Multiply the covered lower 3 x the single digit above it the "5" (3x5= 15)
- Add 180 + 15 = 195.

Beauty of Mathematics:

Here are some funny math interesting facts. All the below tricks are based around the sequential manipulation of the numbers being used for input and output.

Sequential Inputs of numbers with 8

1 x 8 + 1 = 9
12 x 8 + 2 = 98
123 x 8 + 3 = 987
1234 x 8 + 4 = 9876
12345 x 8 + 5 = 98765
123456 x 8 + 6 = 987654
1234567 x 8 + 7 = 9876543
12345678 x 8 + 8 = 98765432
123456789 x 8 + 9 = 987654321

Sequential 1's with 9

1 x 9 + 2 = 11
12 x 9 + 3 = 111
123 x 9 + 4 = 1111
1234 x 9 + 5 = 11111
12345 x 9 + 6 = 111111
123456 x 9 + 7 = 1111111
1234567 x 9 + 8 = 11111111
12345678 x 9 + 9 = 111111111
123456789 x 9 + 10 = 1111111111

Sequential 8's with 9

9 x 9 + 7 = 88
98 x 9 + 6 = 888
987 x 9 + 5 = 8888
9876 x 9 + 4 = 88888
98765 x 9 + 3 = 888888
987654 x 9 + 2 = 8888888
9876543 x 9 + 1 = 88888888
98765432 x 9 + 0 = 888888888

Numeric Palindrome with 1's

1 x 1 = 1
11 x 11 = 121

111 x 111 = 12321
1111 x 1111 = 1234321
11111 x 11111 = 123454321
111111 x 111111 = 12345654321
1111111 x 1111111 = 1234567654321
11111111 x 11111111 = 123456787654321
111111111 x 111111111 = 12345678987654321

Without 8

12345679 x 9 = 111111111
12345679 x 18 = 222222222
12345679 x 27 = 333333333
12345679 x 36 = 444444444
12345679 x 45 = 555555555
12345679 x 54 = 666666666
12345679 x 63 = 777777777
12345679 x 72 = 888888888
12345679 x 81 = 999999999

Sequential Inputs of 9

9 x 9 = 81
99 x 99 = 9801
999 x 999 = 998001
9999 x 9999 = 99980001
99999 x 99999 = 9999800001
999999 x 999999 = 999998000001
9999999 x 9999999 = 99999980000001
99999999 x 99999999 = 9999999800000001
999999999 x 999999999 = 999999998000000001
.....

Sequential Inputs of 6

6 x 7 = 42
66 x 67 = 4422
666 x 667 = 444222
6666 x 6667 = 44442222
66666 x 66667 = 4444422222

666666 x 666667 = 444444222222
6666666 x 6666667 = 44444442222222
66666666 x 66666667 = 4444444422222222
666666666 x 666666667 = 444444442222222222
……

Here are some shortcuts/tips to find out the day of the week from the given date. You can play these trick as instructed, with your parents or friends and prove your talent to them.

Day of the Week:

January has 31 days. It means that every date in February will be 3 days later than the same date in January(28 is 4 weeks exactly). The below table is calculated in such a way. Remember this table which will help you to calculate.

January	0
February	3
March	3
April	6
May	1
June	4
July	6
August	2
September	5
October	0
November	3
December	5

Step1: Ask for the Date. Ex: 23rd June 1986
Step2: Number of the month on the list, June is 4.
Step3: Take the date of the month, that is 23
Step4: Take the last 2 digits of the year, that is 86.
Step5: Find out the number of leap years. Divide the last 2 digits of the year by 4, 86 divide by 4 is 21.
Step6: Now add all the 4 numbers: 4 + 23 + 86 + 21 = 134.

Step7: Divide 134 by 7 = 19 remainder 1.
The reminder tells you the day.

Sunday	0
Monday	1
Tuesday	2
Wednesday	3
Thursday	4
Friday	5
Saturday	6

Answer: Monday