# Math Magic - Guess Your Birthday Trick

Here's a fun trick to show a friend.

Tell your friend to think of their birthday in his/her head (NOT telling you the answer, of course) and you are going to guess it.


Step 1) Have them take the month number from their birthday: January = 1, Feb = 2 etc.
Step 2) Multiply that by 5
Step 3) Then add 6
Step 4) Then multiply that total by 4
Step 5) Then add 9
Step 6) Then multiply this total by 5 once again
Step 7) Finally, have them add to that total the day they were born on. If they were born on the 18th, they add 18, etc.

Have them give you the total. In your head or on a piece of paper, subtract 165 from the number they give you, and you will have the month and day they were born on!

-----------------------------------------------------------------------------------------


For Example, Ms. Holland is going to show Ms. Li this Guess Your Birthday Trick. Ms. Holland will then ask Ms. Li to do Step 1 to 7 by herself. (If it's too hard for your friend to do all the computations in his/her head, you can let them use a piece of paper or a calculator to compute.)

So Ms. Li will then do the following computations:
Ms. Li was born in January so I use 1. (Step 1)
Then, I will multiply 1 by 5, which gives me 5. (Step 2)
(Step 3) Add 6 to the answer in Step 2, then I will have 11.
(Step 4) 11 x 4 = 44
(Step 5) 44 + 9 = 53
(Step 6) 53 x 5 = 265
(Step 7) I was born on the 9th, so I would add 9 to the answer of Step 6, which gives me 274.

At the end, Ms. Li will tell Ms. Holland that her total is 274. Ms. Holland will then take 274 and subtract 165 from it. 274-165 = 109 and Ms. Holland just figured out Ms. Li's birthday - January 9th!

Isn't that cool?

After computing, Ms. Holland said her number is 1389. Can you figure out when her birthday is?

## Finding Someone's Age - Number Trick

- Ask the person to **multiply** the first number of his or her age **by 5**.
- Tell them to **add 3.**
- Now tell them to **double** this figure.
- Finally, have the person **add the second number** of his or her age to the figure and have them tell you their answer.
- **Deduct 6** and you will have their age.

## Math Trick #2

1) Think of any number

2) Subtract 1 from the number you have thought of

3) Multiply that number by 3

4) Add 12

5) Divide that number by 3

6) Add 5

7) Subtract the original number you had thought of from that answer

### Answer = 8