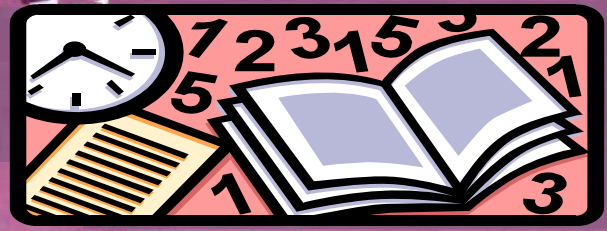




By Mr Numbervator

# MIND BOGGLING MATHS

Try this with your family and friends!



## WOW FACTOR



Here's a great trick to amaze and wow your friends and you can even turn it into a mind reading activity. Ask someone to choose any number between 50 and 100 and tell you:

74!

Now the number you started with was 74 so subtract 38 from 74:

$$\begin{array}{r} 74 \\ - 38 \\ \hline 36 \end{array}$$

The amazing thing is the answer will always be 36 for any number chosen between 50 and 100.

$$\begin{array}{r} \text{Number} \\ \text{chosen} = 92 \\ + 63 \\ \hline 155 \end{array}$$

Now move the 1 digit in the hundreds place and bring it round to the 55 to add it. So you have  $55 + 1 = 56$ . Your original number was 92, so  $92 - 56 = 36$ . Once again the answer is 36 and always will be!

$$\begin{array}{r} \text{Number} \\ \text{chosen} = 74 \\ + 63 \\ \hline 137 \end{array}$$

Next add 63 onto the chosen number. You must always add 63 no matter what number is chosen.

Now move the digit in the far left column (in this case it's the '1' in the hundreds place) and bring it round to the 37 to add it.

So you have:

$$37 + 1 = 38$$

## SPECIAL subtraction

Here's an interesting way to subtract! Choose a number, Lisa. Make sure it is a two digit number with both digits different!



Okay 51 it is! Turn the number around (reverse it) to get 15:

$$\begin{array}{r} 51 \\ - 15 \\ \hline \end{array}$$

Now concentrate only on the tens column:

$$5 - 1 = 4$$

Multiply this digit by 9 (you always multiply whatever the digit is by 9):

$$4 \times 9 = 36$$

And  $36 = 51 - 15$

Wow! That's the sum you started with! So you get an answer of 36 which is  $51 - 15$

Let's try another number; we'll try 58:

$$\begin{array}{r} 85 \\ - 58 \\ \hline \end{array}$$

Now concentrate on the tens column:

$$8 - 5 = 3$$

Multiply 3 by 9 = 27, which is the answer to  $85 - 58!$