

## Mad maths 29 contribution

You all should know by now how much fun we always have looking at my special number patterns because it's such a great way to learn about numbers. Well here's another selection of patterns for us to investigate and play around with. Once you have figured out the different patterns, why not make 'sum' up of your own!

$$1 \times 9 = 9$$

$$11 \times 99 = 1089$$

$$111 \times 999 = 110889$$

$$1111 \times 9999 = 11108889$$

Can you write down the next calculations in this pattern. You should be able to follow the pattern and get the answers without the need for a calculator.

$$11111 \times 99999 =$$

$$111111 \times 999999 =$$

$$1111111 \times 9999999 =$$

Let's try this one :

$$2 \times 9 = 18$$

$$22 \times 99 = 2178$$

$$222 \times 999 = 221778$$

Now try to follow this pattern and get the answers

$$2222 \times 9999 =$$

$$22222 \times 99999 =$$

This one is a goodie!

$$12 \times 12 = 144$$

now let's reverse 12 to get

$$21 \times 21 = 441 \text{ interesting eh!}$$

So let's try with

$$13 \times 13 = 169$$

reverse to get

$$31 \times 31 = 961$$

So you try the following :

$$14 \times 14 =$$

$$41 \times 41 =$$

$$15 \times 15 =$$

$$51 \times 51$$

**This next one I'm not too sure about what's going to happen so I'll need you to write to me with your explanations so let's get investigating**

$$4 \times 4 =$$

$$34 \times 34 =$$

$$334 \times 334 =$$

$$3334 \times 3334 =$$

**This is a new number trick that is storming school playgrounds around the country – make sure you know it because it's bound to hit a playground near you!**

**Let's imagine that we want to find out how much the following statement is true as a percentage. We can do it this way then you can make up your own statements about things that you like !**

**Write a three word sentence eg Rosie likes maths ( we want to find out what percentage of this statement is true ). Next count the number of each of the letters that appear in the middle word ( likes ) that are the same in the other 2 words and write it as below:**

**Rosie  
Likes  
Maths**

**Let's see how many L's, I's, k's, e's and s's appear in Rosie and Maths**

**Rosie  
Likes  
Maths**

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**12122**

**( there is 1 letter L, 2 letter I, 1 letter k, 2 letter e and 2 letter s )**

**Now add the digits in 12122 that are next to each other until you get to your first 2 digit number as below;**

**12122  
3334  
667  
1213  
334  
67**

**This means that Rosie likes Maths 67%**

**Have fun!**