

Number Neighbours!



**CALCULATOR
CRUNCH**

DAY 9

Number Neighbours!



Choose four consecutive numbers e.g 1, 2, 3 and 4.

Keep the numbers in order and create different multiplication equations

e.g

$$1 \times 2 \times 3 \times 4 = 24$$

$$12 \times 3 \times 4 = 144$$

etc.

How many different products can you make?

Try it with a different set of four numbers.

What do you notice?

Can you find a set of numbers where all the products are a multiple of 5?

Keys allowed:

7	8	9	RESET
4	5	6	×
1	2	3	
0			=

Aim of the activity

This activity is all about keeping your numbers in order. We've chosen 1, 2, 3 and 4 as our four consecutive numbers – numbers which are next to each other when we count.

Using just multiplication, how many different products can we make with those four numbers, remembering to keep them in order.

The product is the name we give to the answer to a multiplication calculation.

We started with $1 \times 2 \times 3 \times 4 = 24$ and then grouped some of the numbers but keeping them in order to get $12 \times 3 \times 4 = 144$.

How many other products can you create following these rules?

What are the highest and lowest products you can make?

Try using another set of number e.g. 5, 6, 7, 8.

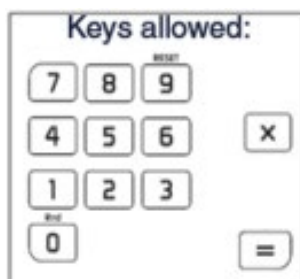
What do you notice this time?

Extra Challenges

Can you find a set of numbers where the products will always be a multiple of 5?

How can you be sure you have found the highest and the lowest product possible? Is it the same rule for all sets of numbers?


Using a calculator



All the number keys are allowed but the multiplication key is the only operation key you can use this time.

How can you be sure that the calculator has given you the correct answer? Is it ok just to do the calculation once or should you do it more to check?


Remember that the calculator is only as accurate as you are!



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e.g
 $1 \times 2 \times 3 \times 4 = 24$
 $12 \times 3 \times 4 = 144$
etc.

How many different products can you make?
Try it with a different set of four numbers.
What do you notice?
Can you find a set of numbers where all the products are a multiple of 5?

