

To use a calculator to create number sequences

Steps to Success:

- 1) I know if my calculator needs 'a constant'
- 2) I can create a number sequence using a constant
- 3) I can solve a number sequence using a constant



Mental Warm Up:

Solve these questions on your calculator...

$$9 \times 8 =$$

$$20 \times 4 =$$

$$£45 + £532 =$$

$$99 \div 3 =$$

$$5.67 - 3.25 =$$

Could you do
any of these
in your head?



If so, is it
quicker to use
a calculator or
your brain?

Mental Warm Up 2:

Solve these questions on your calculator or in your head...

$$435 - 235$$

$$£3.44 - £2.08$$

$$0.7 - 3.3$$

$$17 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 =$$

You should get a
negative answer
for number 3

The last one
can be done
more easliy...

Look at this question:

$$45 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 =$$

The '4' in this question is called a **'constant'** because you are constantly adding the same number!



A calculator can make adding constant easily.

$$45 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 =$$

For some calculators, you just need to keep pressing =

eg: Press 4 5 + 4 = = = = = = = = = =

(ten = because there are 10 fours)

For some, you need to press + 2 times to tell the calculator that you want to use a constant:

eg: Press 4 5 ++ 4 = = = = = = = = = =

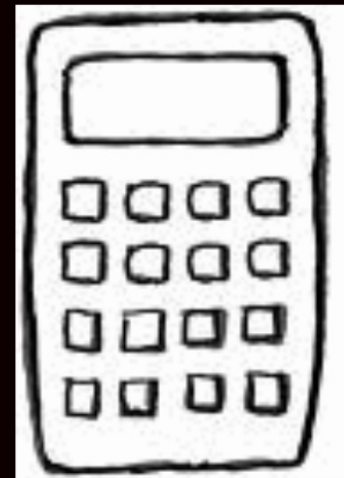
Which kind of calculator do you have?

Number sequences:

It is easy to make number sequences with calculators:

88, 82, 76, 70, 64, _____, _____, _____

For the above I put 88 into my calculator and subtracted 6 using a constant. Use your calculator to find the next 3 numbers.



Try this one, work out the constant first...

3, 6, 12, 24, 48, 96, _____, _____, _____

Hint:

Try the constant as $\times 2$

What about this...

4562, 4238, 3914,

Hint: -324

With a partner, make some number sequences using the constant on a calculator.

Try to use different operations, +, -, ÷ and x
There should be 6 numbers in your sequence.