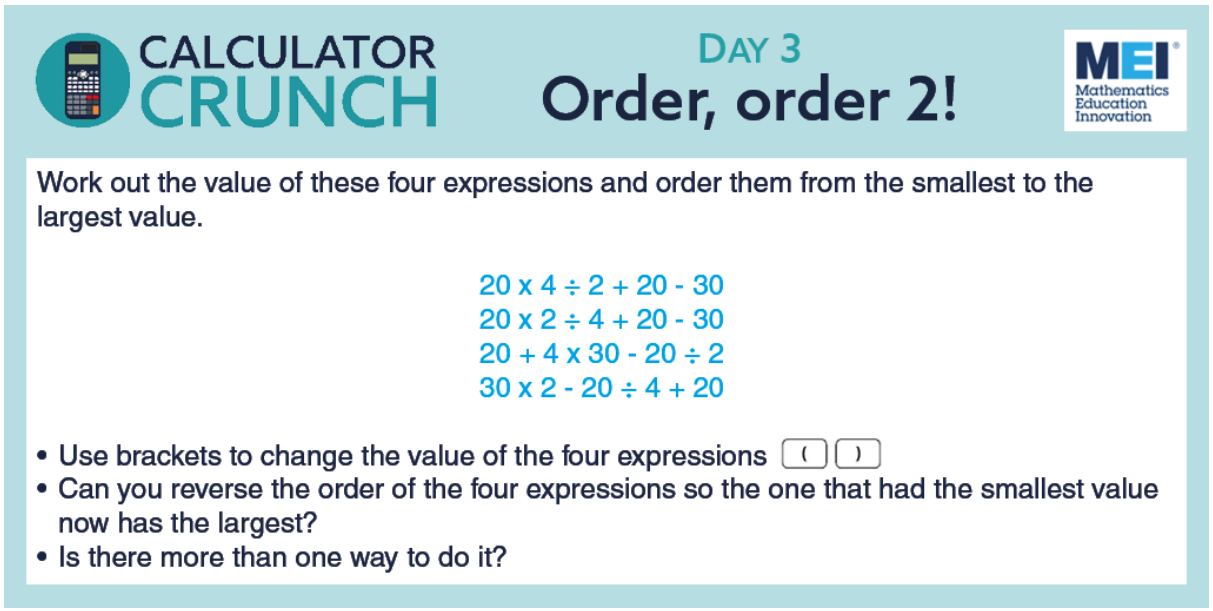
Order, Order 2!



Aim of the activity

To use the order of operations to work out the value of an expression. Then to use brackets to change the value of an expression

If you need a reminder, look at the **'Top Tips'** for the ways to remember the order of operations.

First you need to work out the value of the expressions as they are written and arrange them in order from the smallest to the largest.

The next part of the challenge is to use brackets to change the value of the expressions.
Can you make the expression that had the smallest value have the largest value?

Can you reverse the order of the operations by using brackets?

- Use brackets to change the value of the four expressions ( )
- Can you reverse the order of the four expressions so the one that had the smallest value now has the largest?
- Is there more than one way to do it?

Is there more than one way to do it?

Extra Challenge

Extra challenge

$20 + 4 \times 30 - 20 \div 2$

Use brackets ( ) or double brackets (( )) to make the value as large and as small as possible

We have just picked one of the expressions this time. Using brackets, or even double brackets. How many different values can it take?

e.g. $(20 + 4 \times (30 - 20)) \div 2$

What is the largest value the expression can have?
What is the smallest?

Top Tips

In year 6, children may learn about BODMAS or BIDMAS which helps them to remember the order of operations
B – brackets
O/I – indices (powers)
D and M – division and multiplication
A and S – addition and subtraction