**Operations’ Properties - Notes**

Operations: addition, subtraction, multiplication and division.

We have noticed that, with addition and multiplication, if you switch the order, you get the same answer. (eg. 5 + 6 = 6 + 5)

We call these operations commutative.

We can use this to simplify calculations:

Examples:

57 + 89 + 43

= 57 + 43 + 89 (because addition is commutative)

= 100 + 89

= 189

Show that 25 × 37 × 4 = 3700

“Calculate 25 × 37 × 4 and check your answer at the end”

25 × 37 × 4

= 25 × 4 × 37 (multiplication is commutative)

= 100 × 37

= 3700

We have noticed that, with addition and multiplication, the brackets can be moved around without changing the answer.

We call these operations associative.

Examples of using this property:

(73 × 5) × 2

= 73 × (5 × 2)

= 73 × 10

= 730