


Adding and Subtracting in Standard Form

There are two different ways to add or subtract in standard form.

 **Example** Work out $(4 \times 10^3) + (6.7 \times 10^2)$

Convert to ordinary numbers

$$(4 \times 10^3) = 4000$$

Counting places like this is useful for standard form conversions, but remember that the decimal point doesn't **actually** move.

$$(6.7 \times 10^2) = 670$$

You may need to use column addition here.

$$(4 \times 10^3) + (6.7 \times 10^2) = 4000 + 670$$
$$= 4670$$

$$4670 = 4.67 \times 10^3$$

Sometimes you will be asked for your answer in standard form, so you would need to convert your answer.

Adjust to the same power of 10

We adjust one number so that it's written with the same power of 10 as the other one.

Leave this number as it is.

$$(4 \times 10^3) + (6.7 \times 10^2)$$

Adjust this number so it's written using 10^3 instead of 10^2

$$= (4 \times 10^3) + (0.67 \times 10^3)$$
$$= 4.67 \times 10^3$$