


Converting To and From Standard Form

Ordinary numbers can be written in standard form, and numbers written in standard form can be converted back to ordinary numbers.

Converting to standard form

 **Example** Write 720 000 in standard form.

1 Write down the non-zero digits as a number between 1 and 10

2 Work out the power of ten. We can count places like this:

7.20000

7.2×10^5

Remember that the decimal point doesn't **actually** move.

Converting from standard form

 **Example** Write 3.4×10^4 as an ordinary number.

This means $3.4 \times 10 \times 10 \times 10 \times 10$

Power of 4 means we multiply by 10 **four** times.

$3.4 \times 10 \times 10 \times 10 \times 10 = 3.4 \times 10000 = 34000$

This can also be done by counting places:

Power of 4 means we multiply by 10 **four** times.

"Fill in" the zeroes for correct place value.

Remember that the decimal point doesn't **actually** move.

3.4



34000