Eleven Plus Maths How To Do – Division by a Decimal Number

(1) Example: 63.02 ÷ 5

Put the sum down as for the usual division sum, putting the decimal point above the decimal point in the dividend.

5/63.02

Divide as usual.

<u>12.604</u>
5/63.020

To divide by a decimal number.

(2) Example: 3.6 ÷ 0.5

You cannot divide by 0.5
Change the divisor 0.5 in to a whole number by multiplying by ten (0.5 x 10 = 5).
You have made the divisor ten times bigger so now you have to make the dividend ten times bigger too (3.6 x 10 = 36).

<u>Note:</u> When you multiplied 0.5 by 10 you moved the figure <u>one place</u> to the <u>left</u>.
When you multiplied 3.6 by ten you moved the figures <u>one place</u> to the <u>left</u>.

Now divide as usual   <u>   7.2</u>
5/ 36 .0

(3) Example: 3.4 ÷ 0.04

(i)   Make the divisor a whole number by <u>multiplying by 100</u> (the figure 4 moves <u>two places</u> to the <u>left</u>).

(ii) Make the dividend <u>100 times bigger</u> by moving the figures <u>two places</u> to the <u>left</u>.

H T U . t h th		H T U . t h th
0 . 0 4		3 . 4
x 100 4 . 0		x 100 3 4 0 . 0

<u>   85.0</u>
4/340.0

(4) Example: 26.23 ÷ 1.4

Multiply both the divisor and dividend by 10 to make the divisor a whole number.

The sum now reads
262.3 ÷ 14

Divide in the usual way.