Topic 10 – Decimal Place Value, x10, x100

The Method

Decimals are shown in tenths, hundredths, thousandths, etc. For example, 26.143 is:

Tens	Units	.	Tenths	Hundredths	Thousandths
2	6	.	1	4	3

When we are asked to multiply or divide a decimal number by 10, 100, 1000, etc there is a simple method!

Multiply: move the decimal point to the right
Divide: move the decimal point to the left

How many places we move it by depends on how many noughts there are in the number we are multiplying or dividing by. For example, when multiplying by 10, we move it one place (one nought in 10). When multiplying by 100, we move it two places (two noughts in 100).

Example: 26.143 x 10

2 6 . 1 4 3   =   261.43

26.143 ÷ 100

2 6 . 1 4 3   =   0.26143

The Questions

1) Write 8 tenths as a decimal: _____

2) Write 8 hundredths as a decimal: _____

3) How many hundredths are there in 0.27? _____ hundredths

4) How many tenths in 1.3? _____ tenths

5) 13.27 x 10 = _____

6) 0.543 x 100 = _____

7) 27.4 x 100 = _____

8) 92.58 ÷ 10 = _____

9) 32.7 ÷ 100 = _____

10) 7.61 ÷ 100 = _____

11) If 3.2 x 73.4 = 234.88, what is 3.2 x 7.34? _____