

Chapter 4

Decimals

Multiplication of Decimals by multiples of 10, 100, 1000

Remember :-

- If you multiply by 10, move all the figures **ONE** place **LEFT** (or move the point one place right).
- If you multiply by 100, move all the figures **TWO** places **LEFT** (or move the point two places right).
- If you multiply by 1000, move all the figures **THREE** place **LEFT** (or move the point three places right).

Be able to multiply any decimal number by a multiple of 10, 100 or 1000

Learn the following rules :-

- To multiply by 20 => multiply by 10 then times by 2.
- To multiply by 300 => multiply by 100 then times by 3.
- To multiply by 4000 => multiply by 1000 then times by 4.

Exercise 1

1. Copy and complete each sentence :-

- a To multiply by 60 you would multiply by 10 then times by
- b To multiply by 800 you would multiply by then times by
- c To multiply by 9000 you would multiply by
- d To multiply by 70

2. Copy and complete using the rules above :-

a $1.32 \times 20 =$

$$\begin{array}{r} 1.32 \\ \times 10 \\ \hline 13.2 \end{array} \rightarrow \begin{array}{r} 13.2 \\ \times 2 \\ \hline \end{array}$$

b 12.213×300

$$\begin{array}{r} 12.213 \\ \times 100 \\ \hline 1221.3 \end{array} \rightarrow \begin{array}{r} \dots\dots\dots \\ \times 3 \\ \hline \dots\dots\dots \end{array}$$

c 1.1234×2000

$$\begin{array}{r} 1.1234 \\ \times 1000 \\ \hline \dots\dots\dots \end{array} \rightarrow \begin{array}{r} \dots\dots\dots \\ \times 2 \\ \hline \dots\dots\dots \end{array}$$

d 1.631×400

$$\begin{array}{r} 1.631 \\ \times 100 \\ \hline \dots\dots\dots \end{array} \rightarrow \begin{array}{r} \dots\dots\dots \\ \times 4 \\ \hline \dots\dots\dots \end{array}$$

3. Find :-

- a 13.23×40
- b 14.12×60
- c 3.951×90
- d 437.6×50
- e 23.13×200
- f 245.3×700
- g 1.048×900
- h 0.076×800
- i 0.073×2000
- j 10.97×5000
- k 0.0078×9000

Chapter 7

Decimal Numbers 2

Multiplying Decimals by 10, 100, 1000

Yet again, you **really must know your tables** !!!!!

Learn the following **simple rules for decimals** :-

If you multiply by 10,

=> move all the figures **ONE** place **LEFT**
(or move the point one place right).

$$\begin{array}{r} 4.37 \\ \times 10 \\ \hline 43.7 \end{array}$$

If you multiply by 100,

=> move all the figures **TWO** places **LEFT**
(or move the point two places right).

$$\begin{array}{r} 21.327 \\ \times 100 \\ \hline 2132.7 \end{array}$$

If you multiply by 1000,

=> move all the figures **THREE** places **LEFT**
(or move the point three places right).

$$\begin{array}{r} 39.4098 \\ \times 1000 \\ \hline 39409.8 \end{array}$$

Be able to multiply a decimal by 10, 100, 1000

Exercise 1

- Write down the answers to the following :-
 - 3.6×10
 - 4.8×10
 - 2.67×10
 - 10×9.17
 - 10×12.52
 - 0.94×10
 - 10×4.08
 - 10×0.03
 - 24.753×10
 - 9.108×10
 - 10×4.007
 - 0.0508×10 .
- Write down the answers to :-
 - 3.82×100
 - 5.41×100
 - 100×6.09
 - 100×8.6
 - 7.478×100
 - 100×0.751
 - 100×0.0481
 - 0.0095×100 .
- Write down the answers to :-
 - 2.947×1000
 - 3.060×1000
 - 4.75×1000
 - 1000×19.3
 - 1000×0.856
 - 0.0948×1000
 - 1000×2.0202
 - 1000×0.8005 .
- A jar of pickles weighs 3.4 pounds. What is the weight of :-
 - 10 jars
 - 100 jars
 - 1000 jars ?
- There are 1000 grams in 1 kilogram. How many grams are there in :-
 - 3.645 kg
 - 29.7 kg
 - 0.9 kg
 - 0.002 kg ?

