



CLASS NOTES

Multiplication of Decimal Numbers

Multiplication of decimal numbers with decimal numbers

Multiply them as whole numbers ignoring the decimal points then count the number of digits starting from the rightmost digit and moved towards left. We then put the decimal point there.

(The number of digits to be counted is obtained by adding the number of digits to the right of the decimal point in the decimal number that are being multiplied.)

Example: Find 1.2×2.5

$$12 \times 25 = 300$$

Number of decimal places = $1 + 1 = 2$. So, count 2 digits towards left and put the decimal point.

$$1.2 \times 2.5 = 3.00$$

Multiplication of decimal numbers by 10, 100 and 1000

When a decimal number is multiplied by 10, 100 or 1000, the digits in the product are same as in the decimal number but the decimal point in the product is shifted to the right by as many of places as there are zeros over one.

If a decimal is multiplied by a power of 10, then the decimal point shifts to the right by the number of zeros present in the power of 10

Example:

$$25.2 \times 10 = \frac{252}{10} \times 10 = 252$$



$$25.2 \times 100 = 2520$$

$$25.2 \times 1000 = 25200$$

