

# Decimals

**10**

**1**

**$\frac{1}{10}$**

**$\frac{1}{100}$**

TENS	ONES	•	TENTHS	HUNDREDTHS
6	2	•	5	0
0	1	•	2	5
5	1	•	9	9



## *Expanded Notation of Decimals*

$$\text{Eg. } 17.53 = (1 \times 10) + (7 \times 1) + (5 \times \frac{1}{10}) + (3 \times \frac{1}{100})$$

OR

$$\text{Eg. } 17.53 = (1 \times 10) + (7 \times 1) + (5 \times 0.1) + (3 \times 0.01)$$

## *Addition and Subtraction of Decimals*


Add or Subtract as you normally do, just line up  
**POINT under POINT**

$$\begin{array}{r} \text{Eg.} \quad 12.\dot{1}0 \\ - \quad \underline{9.\dot{0}3} \\ \quad \underline{3.\dot{0}7} \end{array}$$

# Multiplication of Decimals

Multiply as you normally do, **count all the decimal places in the numbers you are multiplying**. Then place the decimal point in the answer after **counting the number of digits from the right**.

Eg. 12.2

$$\begin{array}{r} \text{X } 1.2 \\ \hline 244 \\ 122 \\ \hline 14.64 \end{array}$$


Number of decimal places in **both** numbers is **two** (.2 & .2)

**Two** places from the right

## Decimals in relation to 1 dollar or 100 cents

Decimal	Fraction	Money
0.05	$\frac{1}{20}$	5¢
0.10	$\frac{1}{10}$	10¢
0.25	$\frac{1}{4}$	25¢
0.50	$\frac{1}{2}$	50¢
1.00	$\frac{1}{1}$	\$1 or 100¢