Simple or Vulgar Fraction e.g:[3/4]

A number expressed with numerator and denominator. Say I have 3 of 10 apples then I will express it as 3/10. The total is written below a horizontal or diagonal line, and the number of parts comprising the fraction (numerator) is written above. Such fractions are called vulgar fractions or simple fractions.

Decimal Fraction e.g:[0.45773]

Expressing the fraction in decimal values (denominator a power of 10) is called decimal fraction. 1/2 is expressed as 0.5 in decimal fraction.

Converting a decimal to vulgar fraction:

Method:

a) Calculate the total numbers after decimal point.

b) Remove the decimal point from the number.

c) Put 1 under the denominator and annex it with "0" as many as the total in step a.

d) Reduce the fraction to its lowest terms.   Example: Consider 0.44

Step a: Total number after decimal point is 2

Step b and c: 44/100

Step d: Reducing it to lowest terms : 44/100 = 22/50 = 11/25

Converting a recurring decimal to vulgar fraction A decimal with recurring value is called recurring decimal.

E.g: 2/9 will give 0.22222222...... where 2 is recurring number.

Method:

a) Separate the recurring number from the decimal fraction.

b) Annex denominator with "9" as many times as the length of the recurring number.

c) Reduce the fraction to its lowest terms.

Example: Consider 0.2323232323

Step a: The recurring number is 23

Step b: 23/99 [the number 23 is of length 2 so we have added two nines]

Step c: Reducing it to lowest terms : 23/99 [it can not be reduced further].

* Mixed Recurring to Fractions:

If N = 0.abcbcbc.... Then N = abc - a / 990 = Repeated & non-repeated digits - Non repeated digits / As many 9's as repeated digits followed by as many zero as non - repeated digits

eg: 0.25757..... = 257 - 2 / 990 = 255 / 990 = 17 / 60.