**ATOMIC ENERGY CENTRAL SCHOOL**

**Class – VI FRACTIONS ( Hand Out) Module 1/4**

Which number do you use to represent a quarter of a pizza?

(i.e., if a pizza is divided into four equal parts)

- Answer :

There is no number with you.

Hence, in this case you use fractions .

- **Fractions represent a part of a whole. The whole may be a single or group of objects but the parts have to be equal** ( ).
- Fractions have two parts:
- Numerator and the Denominator

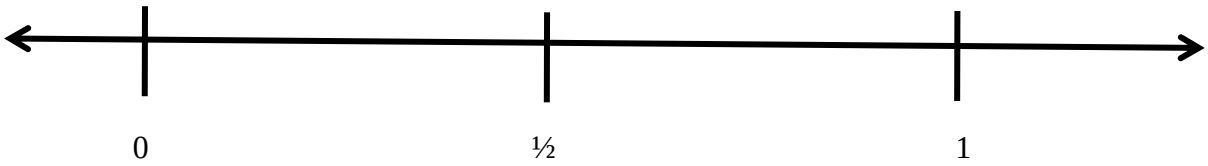
$\frac{1}{4}$

1 → Numerator represents the part of a whole.

4 → Denominator represents the whole

Number line

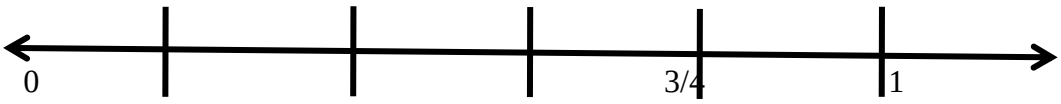
- Let us try to mark ½ on the number line. ½ is greater than 0 and lesser than 1. hence, we should mark it between 0 and 1. so we have to divide the space between 0 and 1 to two parts as the denominator of the number says that there are two equal parts and show 1 part as 1/2




EXAMPLE

represent ¾ on number line.

- We have to divide the space between 0 and 1 into four parts as the denominator of the number says that there are four equal parts.

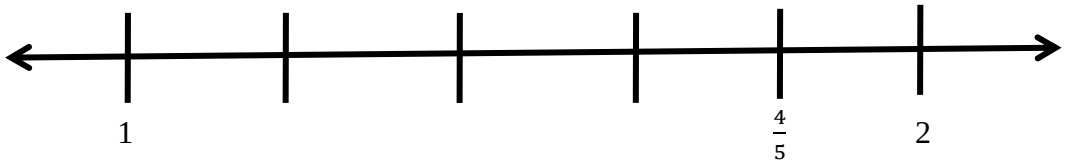


Example

Represent $1\frac{4}{5}$ on number line.

- We have to divide the space between 1 and 2 to 5 parts as

( it lies between 1 & 2 )the denominator of the number says that there are 5 equal parts.




PROPER FRACTIONS

- Proper fractions: A proper fraction is a number representing part of a whole. In a fraction the denominator shows the number of parts into which the whole is divided and the numerator shows the number of parts which have been considered. Hence in a proper fraction numerator is always less than the denominator such as $\frac{2}{5}, \frac{4}{7}, \frac{8}{11}$.

IMPROPER FRACTIONS

- Improper fractions: The fractions where the numerator is bigger than the denominator are called improper fractions such as $\frac{9}{5}, \frac{15}{11}, \frac{7}{4}$.

MIXED FRACTIONS

- Mixed fractions: A mixed fraction has a combination of a whole and a proper fraction such as $1\frac{3}{4}, 5\frac{5}{6}, 7\frac{1}{4}$.
- Converting mixed fractions to improper fractions

  Example : Express the following as improper fractions.

  (a) 3 3/4 (b)2 5/6

  (a) 3 3/4 = 3+ 3/4 = 12/4 + 3/4 =17/4

  (b) 2 5/6 = 2+5/6 =12/6 +5/6 =17/6

- Converting improper fractions to mixed fractions

  Example : Express the following as mixed fractions.

  (a) 18/5

  5) 18 (3
  15
  ---
  3
  ---

  18/5 = 3 3/5

  (b) 15/4

  4) 15 (3
  12
  ---
  3
  ---

  15/4 = 3 3/4