ATOMIC ENERGY CENTRAL SCHOOL

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

▶ **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

TYPES OF FRACTIONS

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 $1\frac{3}{4}, 5\frac{5}{6}, 7\frac{1}{4}$.

CONVERSION OF FRACTIONS:

▶ 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

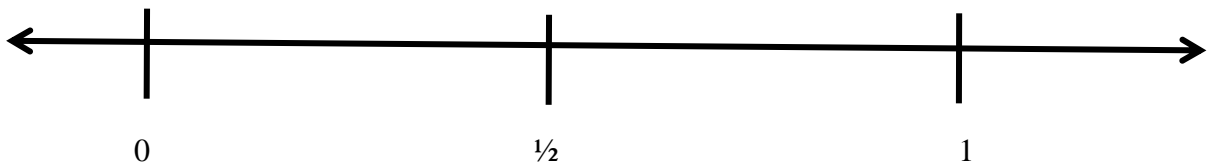Example : Express the following as mixed fractions.
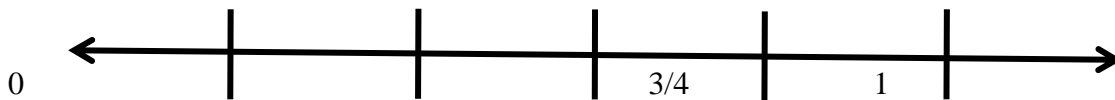
 (a)18/5 (b) 15/4

REPRESENTATION OF FRACTIONS ON 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

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←——————|————————————————|————————————————|——————→
        0               ½                1
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EXAMPLE

A) 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.

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←———|———|———|———|———|———→
 0                3/4     1
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Example

B)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.

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←———|———|———|———|———|———|———→
 1                        1$\frac{4}{5}$   2
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