## Standard (or simplest) form of a rational number

## A rational number $\frac{p}{q}$ is said to be in standard form if:

- i. The denominator
- ii. is a positive integer

iii. P and q are co- primes, i.e., have no common factor other then 1.

## Let us understand with an Example:

**Example:** Express  $-\frac{15}{36}$  in standard form.

**Solution:** The denominator of  $-\frac{15}{36}$  is positive, for expressing it in standard form, we find the HCF of 15 and 36, which is 3.

Now on dividing both the numerator and denominator by 3, we get  $\left(\frac{-15}{36}\right)$  =

 $\frac{(-15)\div3)}{(36\div3)} = \frac{(-5)}{12} \,.$ 

**Thus,** the standard form of  $\frac{(-15)}{36}$  is  $\frac{(-5)}{12}$