

**Fractions**

**Like Unlike Fractions**

Like fractions are fractions with same denominator. For eg ½, 15/2, 19/2 and so on.

Unlike fractions are fractions with different denominators. For e.g. 16/5, 7/8, ½, 2/5, 2/10.

It is important to note that like and unlike fractions are decided only on the basis of denominator. The value of numerator does not matter.

**Comparing Fractions**

Comparing Like Fractions

* In this case, the denominators are the same. So, only numerators are compared.
* The one with bigger numerator is the bigger fractions.
* 3/4 > 1/4

Comparing Unlike Fractions

* In this case, denominators are different.
* Firstly, we try and make the denominators same.
* This is done by converting fractions into equivalent fractions. To do this, the LCM of different denominators.
* Each fraction is converted into a form such that the LCM as the common denominator of both the fractions.
* The fractions now obtained are like fractions.
* Comparison of like fractions can be done by comparing the numerators.

1/3 and 2/4

LCM of 3 and 4 = 12

1\*4/3\*4 and 2\*3/4\*3

4/12 and 6/12

Since the denominators are the same, comparing the numerators we get :

4/12 < 6/12

Problem: Compare the fractions   a)  3/6 & 5/6     b) 1/7 & 1/4

Solution:

a)  3/6 and 5/6 are like fractions because they have common denominator.

5 is greater than 3, Hence 5/6 is greater than 3/6

b)  1/7 and ¼ are unlike fractions.

Firstly, we try and make the denominators same.

This is done by converting fractions into equivalent fractions. To do this, the LCM of different denominators.

The LCM of 7 and 4 is 28. We get :

1\*4/7\*4 and 1\*7/4\*7

4/28 and 7/28

These are like fractions now. Comparing the numerators, we get:

4/28<7/28.