Exercise 2A

Solution 01

Answer :

We have the following:

(i) 58 and 712

By cross multiplication, we get:
5 × 12 = 60 and 7 × 8 = 56
However, 60 > 56
∴ 58>712

(ii) 59and1115
By cross multiplication, we get:
5 × 15 = 75 and 9 × 11 = 99
However, 75 < 99
∴ 59<1115

(iii) 1112and1516
By cross multiplication, we get:
11 × 16 = 176 and 12 × 15 = 180
However, 176 < 180
∴ 1112<1516

Solution 02

Answer :

(i) The given fractions are $\frac{3}{4}, \frac{5}{6}, \frac{7}{9}$ and $\frac{11}{12}$.

LCM of 4, 6, 9 and 12 = 36

Now, let us change each of the given fractions into an equivalent fraction with 72 as its denominator.

$\frac{3}{4} = \frac{3\times9}{4\times9} = \frac{27}{36}$

$\frac{5}{6} = \frac{5\times6}{6\times6} = \frac{30}{36}$

$\frac{7}{9} = \frac{7\times4}{9\times4} = \frac{28}{36}$

$\frac{11}{12} = \frac{11\times3}{12\times3} = \frac{33}{36}$

Clearly, $\frac{27}{36} < \frac{28}{36} < \frac{30}{36} < \frac{33}{36}$

Hence, $\frac{3}{4} < \frac{7}{9} < \frac{5}{6} < \frac{11}{12}$

∴ The given fractions in ascending order are $\frac{3}{4}, \frac{7}{9}, \frac{5}{6}$ and $\frac{11}{12}$.

(ii) The given fractions are: $\frac{4}{5}, \frac{7}{10}, \frac{11}{15}$ and $\frac{17}{20}$.

LCM of 5, 10, 15 and 20 = 60

Now, let us change each of the given fractions into an equivalent fraction with 60 as its denominator.

$\frac{4}{5} = \frac{4\times12}{5\times12} = \frac{48}{60}$

********** END **********