

Exercise 2A

Solution 01

Answer:

We have the following:

(i) 58 and 712

By cross multiplication, we get:

 $5 \times 12 = 60$ and $7 \times 8 = 56$

However, 60 > 56

: 58>712

(ii) 59and1115

By cross multiplication, we get:

5 x 15 = 75 and 9 x 11 = 99

However, 75 < 99

: 59<1115

(iii) 1112and1516

By cross multiplication, we get:

11 x 16 = 176 and 12 x 15 = 180

However, 176 < 180

: 1112<1516

Solution 02

(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. $\frac{3}{4} = \frac{3 \times 9}{4 \times 9} = \frac{27}{30}$

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

$$\frac{7}{9} = \frac{7 \times 4}{9 \times 4} = \frac{28}{36}$$

$$\frac{11}{12} = \frac{11 \times 3}{12 \times 3} = \frac{33}{36}$$

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.

$$\frac{4}{5} = \frac{4 \times 12}{5 \times 12} = \frac{48}{60}$$

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