



### Exercise 5D

Thus, we have;

$$\frac{3}{4} = \frac{3 \times 6}{4 \times 6} = \frac{18}{24}, \frac{5}{8} = \frac{5 \times 3}{8 \times 3} = \frac{15}{24}, \frac{11}{12} = \frac{11 \times 2}{12 \times 2} = \frac{22}{24}$$

$$\text{Clearly, } \frac{22}{24} > \frac{18}{24} > \frac{17}{24} > \frac{15}{24}$$

$$\therefore \frac{11}{12} > \frac{3}{4} > \frac{17}{24} > \frac{5}{8}$$

Hence, the given fractions can be arranged in the descending order as follows:

$$\frac{11}{12}, \frac{3}{4}, \frac{17}{24}, \frac{5}{8}$$

Q23

**Answer :**

The given fractions are  $\frac{7}{9}$ ,  $\frac{5}{12}$ ,  $\frac{11}{18}$  and  $\frac{17}{36}$ .

L.C.M. of 9, 12, 18 and 36 =  $(3 \times 3 \times 2 \times 2) = 36$

3	9, 12, 18, 36
3	3, 4, 6, 12
2	1, 4, 2, 4
2	1, 2, 1, 2
1	1, 1, 1, 1

We convert each of the fractions whose denominator is not equal to 36 into an equivalent fraction with denominator 36.

Thus, we have:

$$\frac{7}{9} = \frac{7 \times 4}{9 \times 4} = \frac{28}{36}; \frac{5}{12} = \frac{5 \times 3}{12 \times 3} = \frac{15}{36}; \frac{11}{18} = \frac{11 \times 2}{18 \times 2} = \frac{22}{36}$$

$$\text{Clearly, } \frac{28}{36} > \frac{22}{36} > \frac{17}{36} > \frac{15}{36}$$

$$\therefore \frac{7}{9} > \frac{11}{18} > \frac{17}{36} > \frac{5}{12}$$

Hence, the given fractions can be arranged in the descending order as follows:

$$\frac{7}{9}, \frac{11}{18}, \frac{17}{36}, \frac{5}{12}$$

**Q24**

**Answer :**

The given fractions are  $\frac{2}{3}$ ,  $\frac{3}{5}$ ,  $\frac{7}{10}$  and  $\frac{8}{15}$ .

L.C.M. of 3, 5, 10 and 15 =  $(2 \times 3 \times 5) = 30$

$$\begin{array}{r|l} 3 & 3, 5, 10, 15 \\ \hline 5 & 1, 5, 10, 5 \\ \hline 2 & 1, 1, 2, 1 \\ \hline & 1, 1, 1, 1 \end{array}$$

So, we convert each of the fractions into an equivalent fraction with denominator 30.

Thus, we have:

$$\frac{2}{3} = \frac{2 \times 10}{3 \times 10} = \frac{20}{30}; \frac{3}{5} = \frac{3 \times 6}{5 \times 6} = \frac{18}{30};$$

$$\frac{7}{10} = \frac{7 \times 3}{10 \times 3} = \frac{21}{30}; \frac{8}{15} = \frac{8 \times 2}{15 \times 2} = \frac{16}{30}$$

$$\text{Clearly, } \frac{21}{30} > \frac{20}{30} > \frac{18}{30} > \frac{16}{30}$$

$$\therefore \frac{7}{10} > \frac{2}{3} > \frac{3}{5} > \frac{8}{15}$$

Hence, the given fractions can be arranged in the descending order as follows:

$$\frac{7}{10}, \frac{2}{3}, \frac{3}{5}, \frac{8}{15}$$

**Q25**

**Answer :**

The given fractions are  $\frac{5}{7}$ ,  $\frac{9}{14}$ ,  $\frac{17}{21}$  and  $\frac{31}{42}$ .

L.C.M. of 7, 14, 21 and 42 =  $(2 \times 3 \times 7) = 42$

$$\begin{array}{r|l} 7 & 7, 14, 21, 42 \\ \hline 2 & 1, 2, 3, 6 \\ \hline 3 & 1, 1, 3, 3 \\ \hline & 1, 1, 1, 1 \end{array}$$

\*\*\*\*\* END \*\*\*\*\*