Exercise 5D

Thus, we have;

$\frac{3}{4} = \frac{3\times6}{4\times6} = \frac{18}{24}$; $\frac{5}{8} = \frac{5\times3}{8\times3} = \frac{15}{24}$; $\frac{11}{12} = \frac{11\times2}{12\times2} = \frac{22}{24}$

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 × 3 × 2 × 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

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

Thus, we have:

$\frac{7}{9} = \frac{7\times4}{9\times4} = \frac{28}{36}$; $\frac{5}{12} = \frac{5\times3}{12\times3} = \frac{15}{36}$; $\frac{11}{18} = \frac{11\times2}{18\times2} = \frac{22}{36}$

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 × 3 × 5) = 30

3	3,5,10,15
5	1,5,10,5
2	1,1,2,1
	1,1,1,1

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

Thus, we have:

$\frac{2}{3} = \frac{2\times10}{3\times10} = \frac{20}{30}$; $\frac{3}{5} = \frac{3\times6}{5\times6} = \frac{18}{30}$;

$\frac{7}{10} = \frac{7\times3}{10\times3} = \frac{21}{30}$; $\frac{8}{15} = \frac{8\times2}{15\times2} = \frac{16}{30}$

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 × 3 × 7) = 42

7	7,14,21,42
2	1,2,3,6
3	1,1,3,3
	1,1,1,1

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