Exercise 4B

Q6

Answer :

(i) $\frac{-2}{5}, \frac{7}{-10}, \frac{-11}{15}, \frac{19}{-30}$

First, we need to convert each negative denominator into positive.

$\frac{-2}{5}, \frac{7\times-1}{-10\times-1}, \frac{-11}{15}, \frac{19\times-1}{-30\times-1}$

$\frac{-2}{5}, \frac{-7}{10}, \frac{-11}{15}, \frac{-19}{30}$

5	5,10,15,30
2	1,2,3,6
3	1,1,3,3
	1,1,1,1

L. C. M. of 5, 10, 15 and 30 is 30.

$\frac{-2\times6}{5\times6} = \frac{-12}{30}$,

$\frac{-7\times3}{10\times3} = \frac{-21}{30}$,

$\frac{-11\times2}{15\times2} = \frac{-22}{30}$,

$\frac{-19\times1}{30\times1} = \frac{-19}{30}$,

Correct order: $\frac{-2}{5} > \frac{19}{-30} > \frac{7}{-10} > \frac{-11}{15}$

(ii) $-2, \frac{-13}{6}, \frac{8}{-3}, \frac{1}{3}$

First, we need to convert each negative denominator into positive.

$-2, \frac{-13}{6}, \frac{8\times-1}{-3\times-1}, \frac{1}{3}$

$-2, \frac{-13}{6}, \frac{-8}{3}, \frac{1}{3}$

3	1,6,3,3
2	1,2,1,1
	1,1,1,1

L. C. M. of 6, 3 and 3 is 6.

$\frac{-2\times6}{1\times6}=\frac{-12}{6}$,

$\frac{-13\times1}{6\times1}=\frac{-13}{6}$,

$\frac{-8\times2}{3\times2}=\frac{-16}{6}$,

$\frac{1\times2}{3\times2}=\frac{2}{6}$,

Correct order: $\frac{1}{3}>-2>\frac{-13}{6}>\frac{-8}{3}$

(iii) $\frac{-4}{9},\frac{5}{-12},\frac{-7}{18},\frac{2}{-3}$

First, we need to convert each negative denominator into positive.

$\frac{-4}{9},\frac{5\times-1}{-12\times-1},\frac{-7}{18},\frac{2\times-1}{-3\times-1}$

$\frac{-4}{9},\frac{-5}{12},\frac{-7}{18},\frac{-2}{3}$

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

L. C. M. of 9, 12, 18 and 3 is 36.

$\frac{-4\times4}{9\times4}=\frac{-16}{36}$,

$\frac{-5\times3}{12\times3}=\frac{-15}{36}$,

$\frac{-7\times2}{18\times2}=\frac{-14}{36}$,

$\frac{-2\times12}{3\times12}=\frac{-24}{36}$

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