

## Exercise 4B

Q6

Answer:

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

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

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

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

$$\frac{-2\times 6}{5\times 6} = \frac{-12}{30}$$
,

$$\frac{-7\times3}{10\times2} = \frac{-21}{20}$$

$$\frac{-11\times2}{15\times2} = \frac{-22}{20}$$

$$\frac{-7 \times 3}{10 \times 3} = \frac{-21}{30}, 
\frac{-11 \times 2}{15 \times 2} = \frac{-22}{30}, 
\frac{-19 \times 1}{30 \times 1} = \frac{-19}{30},$$

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

$$\left(\mathrm{ii}\right)-2,\tfrac{-13}{6}\,,\tfrac{8}{-3}\,,\tfrac{1}{3}$$

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

$$\begin{array}{c} -2, \frac{-13}{6}, \frac{8 \times -1}{-3 \times -1}, \frac{1}{3} \\ -2, \frac{-13}{6}, \frac{-8}{3}, \frac{1}{3} \end{array}$$

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

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

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

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

$$\frac{1\times6}{-13\times1} = \frac{6}{6}, 
\frac{-13\times1}{6\times1} = \frac{-13}{6}, 
\frac{-8\times2}{3\times2} = \frac{-16}{6}, 
\frac{1\times2}{3\times2} = \frac{2}{6},$$

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

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

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

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

First, we need to com
$$\frac{-4}{9}, \frac{5\times -1}{-12\times -1}, \frac{-7}{18}, \frac{2\times -1}{-3\times -1}$$

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

$$\frac{3}{9,12,18,3}$$

$$\frac{3}{3,4,6,1}$$

$$\frac{2}{1,4,2,1}$$

$$\frac{2}{1,2,1,1}$$

$$\frac{1,1,1,1}{1,1,1,1}$$

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

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

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

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

$$\frac{-7\times2}{10000} = \frac{-14}{1000}$$

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

$$\frac{-5 \times 3}{12 \times 3} = \frac{-15}{36},$$

$$\frac{-7 \times 2}{18 \times 2} = \frac{-14}{36},$$

$$\frac{-2 \times 12}{3 \times 12} = \frac{-24}{36}$$

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