Exercise 4B

Q2

Answer :

(i) $\frac{5}{6}$. This is because 0 can be written as $\frac{0}{6}$ and $\frac{0}{6} < \frac{5}{6}$.

(ii) $\frac{-3}{5} < 0$. This is because 0 can be written as $\frac{0}{5}$ and $-3 < 0$.

(iii) $\frac{5}{8} > \frac{3}{8}$. This is because $5 > 3$.

(iv) $\frac{7}{9} > \frac{5}{9}$. This is because $7 > 5$.

(v) $\frac{-6}{11} < \frac{-5}{11}$. This is because $-6 < -5$.

(vi) $\frac{-15}{4} > \frac{-17}{4}, -15 > -17$

Q3

Answer :

(i) $\frac{5}{9}, \frac{-3}{-8}$

$\frac{(-3)\times(-1)}{(-8)\times(-1)} = \frac{3}{8}$

L. C. M. of 9 and 8 *is* 72.

$\frac{5\times8}{9\times8} = \frac{40}{72}$

$\frac{3\times9}{8\times9} = \frac{27}{72}$

$27 < 40$

$\frac{-3}{-8} < \frac{5}{9}$

So, $\frac{5}{9}$ is greater.

(ii)

$\frac{4}{-3}, \frac{-8}{7}$

3	9,8
3	3,8
2	1,8
2	1,4
2	1,2
	1,1

We will convert each negative denominator into positive.

$\frac{4\times-1}{-3\times-1}=\frac{-4}{3}$

L. C. M. of 3 and 7 is 21.

$\frac{-4\times(7)}{(3)\times(7)}=\frac{-28}{21}$

$\frac{(-8)\times3}{7\times3}=\frac{-24}{21}$

$(-24)>(-28)$

$\frac{-8}{7}>\frac{4}{(-3)}$

So, $\frac{-8}{7}$ is greater.

(iii)

$\frac{-12}{5}, -3$

L. C. M. of 5 and 1 is 5.

$\frac{-12\times1}{5\times1}=\frac{-12}{5}$

$\frac{-3\times5}{1\times5}=\frac{-15}{5}$

$-12>-15$

$\frac{-12}{5}>-3$

$\frac{-12}{5}$ is greater.

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