Exercise 4C

$= \frac{-13}{60}$

(iii)

$-1 + \frac{7}{-9} + \frac{11}{12}$

We need a positive denominator.

$\frac{7}{-9} \times \frac{-1}{-1} = \frac{-7}{9}$

Now, L.C.M. of 1, 9 and 12 is 36.

$\frac{-1}{1} = \frac{-1 \times 36}{1 \times 36} = \frac{-36}{36}$

$\frac{-7}{9} = \frac{-7 \times 4}{9 \times 4} = \frac{-28}{36}$

$\frac{11}{12} = \frac{11 \times 3}{12 \times 3} = \frac{33}{36}$

3	9,12
3	3,4
2	1,4
2	1,2
	1,1

$\frac{-36}{36} + \frac{-28}{36} + \frac{33}{36}$

$= \frac{-36-28+33}{36}$

$= \frac{-64+33}{36}$

$= \frac{-31}{36}$

$= \frac{-5}{4}$

(iv)

$\frac{-11}{39} + \frac{5}{26} + \frac{2}{1}$

L.C.M. of 39, 26 and 1 is 78.

$\frac{-11}{39} = \frac{-11\times2}{39\times2} = \frac{-22}{78}$

$\frac{5}{26} = \frac{5\times3}{26\times3} = \frac{15}{78}$

$\frac{2}{1} = \frac{2\times78}{1\times78} = \frac{156}{78}$

Now , $\frac{-22}{78} + \frac{15}{78} + \frac{156}{78}$

$= \frac{-22+171}{78}$

$= \frac{149}{78}$

13	39,26
3	3,2
2	1,2
	1,1

(v)

$2 + \frac{-1}{2} + \frac{-3}{4}$

L.C.M. of 2 and 4 is 4.

$2 = \frac{2\times4}{1\times4} = \frac{8}{4}$

$\frac{-1}{2} = \frac{-1\times2}{2\times2} = \frac{-2}{4}$

$\frac{-3}{4} = \frac{-3\times1}{4\times1} = \frac{-3}{4}$

$\frac{8}{4} + \frac{(-2)}{4} + \frac{(-3)}{4}$

$= \frac{8-2-3}{4}$

$= \frac{3}{4}$

2	2,4
2	1,2
	1,1

(vi) $\frac{-9}{11} + \frac{2}{3} + \frac{-3}{4}$

L.C.M. of 11, 3 and 4 is 132.

$\frac{-9}{11} = \frac{-9\times12}{11\times12} = \frac{-108}{132}$

$\frac{2}{3} = \frac{2\times44}{3\times44} = \frac{88}{132}$

$\frac{-3}{4} = \frac{-3\times33}{4\times33} = \frac{-99}{132}$

$\frac{-108}{132} + \frac{88}{132} + \frac{(-99)}{132}$

$= \frac{-108+88-99}{132}$

$= \frac{-207+88}{132} = \frac{-119}{132}$

2	11,3,4
2	11,3,2
11	11,3,1
3	1,3,1
	1,1,1

Q5.

Answer :

(i) $\frac{12}{5} = 2\frac{2}{5} = 2 + \frac{2}{5}$

(ii) $\frac{-11}{7} = \left(-\frac{11}{7}\right) = \left(-1\frac{4}{7}\right) = -1 + \left(\frac{-4}{7}\right)$

(iii) $\frac{-25}{9} = \left(-\frac{25}{9}\right) = -\left(2\frac{7}{9}\right) = -2 + \left(\frac{-7}{9}\right)$

(iv) $\frac{-103}{20} = -\left(\frac{103}{20}\right) = -\left(5\frac{3}{20}\right) = -5 + \left(\frac{-3}{20}\right)$

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