

Exercise 4C

$$=\frac{3}{5}$$

(ii)
$$\frac{-12}{7} + \frac{3}{7} + \frac{-2}{7}$$

$$= \frac{(-12)}{7} + \frac{3}{7} + \frac{(-2)}{7}$$

$$= \frac{-12+3-2}{7}$$

$$= \frac{-14+3}{7}$$

$$= \frac{-11}{7}$$

(iii)
$$\frac{11}{-12} + \frac{3}{-8} + \frac{1}{4}$$

We need a positive denominator.

$$\frac{11}{-12} \times \frac{-1}{-1} = \frac{-11}{12} \text{ and } \frac{3}{-8} \times \frac{-1}{-1} = \frac{-3}{8}$$
L.C.M. of the denominators 12, 8 and 4 is 24.
$$\therefore \frac{-11 \times 2}{12 \times 2} = \frac{-22}{24}$$

$$\frac{-3 \times 3}{8 \times 3} = \frac{-9}{24}$$

$$\frac{1 \times 6}{4 \times 6} = \frac{6}{24}$$
Now, $\frac{(-22)}{24} + \frac{(-9)}{24} + \frac{6}{24}$

$$= \frac{-22 - 9 + 6}{24}$$

$$= \frac{-31 + 6}{24}$$

$$= \frac{-31 + 6}{24}$$

$$= \frac{-25}{24}$$
(iv) $\frac{-16}{9} + \frac{-5}{12} + \frac{7}{18}$

$$= \frac{-24}{24}$$

$$= \frac{-31+6}{24}$$

$$= \frac{-25}{24}$$
(1-1) -16 + -5 + 7

$$(iv)^{\frac{-16}{9} + \frac{-5}{12} + \frac{7}{18}}$$

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

$$\frac{-16\times4}{9\times4} = \frac{-64}{36}$$

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

$$\frac{7\times2}{18\times2} = \frac{14}{36}$$
Now, $\frac{(-64)}{36} + \frac{(-15)}{36} + \frac{14}{36}$

$$= \frac{-64-15+14}{36}$$

$$= \frac{-65}{36}$$

$$3 | 9,12,18$$

$$3 | 3,4,6$$

$$2 | 1,4,2$$

$$2 | 1,2,1$$

$$1,1,1$$

$$(v) - 3 + \frac{1}{8} = \frac{-2}{5}$$

L.C.M. of the denominators 1, 8 and 5 is 40.

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