

Exercise 4C

Q1

Answer:

$$\frac{\binom{\mathsf{i}}{2}}{7} + \frac{3}{7} = \frac{12+3}{7} = \frac{15}{7}$$

$$\frac{\stackrel{\text{(ii)}}{-2}}{5} + \frac{1}{5} = \frac{-2+1}{5} = \frac{-1}{5}$$

(iii)

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

$$\frac{-3}{8} + \frac{1}{8} = \frac{-3+1}{8} = \frac{-2}{8}$$

(iv)

$$\frac{\frac{7}{-11} \times \frac{-1}{-1} = \frac{-7}{11}}{\frac{-5}{11} + \frac{-7}{11} = \frac{-5 + (-7)}{11} = \frac{-5 - 7}{11} = \frac{-12}{11}$$

(V)

$$\frac{-11}{-13} \times \frac{-1}{-1} = \frac{11}{13}$$

$$=\frac{-9}{13}+\frac{11}{13}=\frac{-9+11}{13}=\frac{2}{13}$$

(vi)

$$\frac{-2}{9} + \frac{-5}{9} = \frac{-2-5}{9} = \frac{-7}{9}$$

(VII)

$$\frac{\text{(-17)}}{9} + \frac{\text{(-11)}}{9} = \frac{-17 - 11}{9} = \frac{-28}{9}$$

$$\begin{array}{l} \text{(Viii)} \\ \frac{5}{-7} \times \frac{-1}{-1} = \frac{-5}{7} \end{array}$$

$$\frac{-3}{7} + \frac{(-5)}{7} = \frac{-3-5}{7} = \frac{-8}{7}$$

Answer:

$$(i)\frac{-2}{5} + \frac{3}{4}$$

The denominators of the given rational numbers are 5 and 4.

L.C.M. of 5 and 4 is 20.

$$\frac{-2}{5} = \frac{(-2)\times 4}{5\times 4} = \frac{-8}{20}$$
$$\frac{3}{4} = \frac{3\times 5}{4\times 5} = \frac{15}{20}$$

$$\frac{3}{4} = \frac{3 \times 5}{4 \times 5} = \frac{15}{20}$$

Now,
$$\frac{(-8)}{20} + \frac{15}{20} = \frac{-8+15}{20} = \frac{7}{20}$$

$$(ii)\frac{-5}{9} + \frac{2}{3}$$

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