

Rational Numbers Ex 1.2 Q6

Answer:

(i)

$$\left(\frac{11}{2} + \frac{-25}{2}\right) + \frac{-17}{3} + \frac{11}{12}$$

$$= \left(\frac{11-25}{2}\right) + \frac{-17}{3} + \frac{11}{12}$$

$$= \frac{-14}{2} + \frac{-17}{3} + \frac{11}{12}$$

$$= -7 + \frac{-17}{3} + \frac{11}{12}$$

$$= \frac{-84-68+11}{12}$$

$$= \frac{-47}{4}$$
(ii)

$$\left(\frac{-6}{7} + \frac{-15}{7}\right) + \frac{-5}{6} + \frac{-4}{9}$$

$$= \left(\frac{-6-15}{7}\right) + \frac{-5}{9} + \frac{-4}{9}$$

$$= \frac{-21}{7} + \frac{-5}{6} + \frac{-4}{9}$$

$$= \frac{-378 - 105 - 56}{126}$$

$$= \frac{-539}{126}$$

$$= \frac{-77}{18}$$
(iii)
$$\left(\frac{3}{5} + \frac{9}{5}\right) + \left(\frac{-7}{3} + \frac{7}{3}\right) + \frac{-13}{15}$$

$$= \left(\frac{3+9}{5}\right) + \left(\frac{-7+7}{3}\right) + \frac{-13}{15}$$

$$= \frac{12}{5} + \frac{-13}{15}$$

$$= \frac{36 - 13}{15}$$

$$= \frac{23}{15}$$
(iv)
$$\left(\frac{4}{13} - \frac{8}{13} + \frac{9}{13}\right) + \frac{-5}{8}$$

$$= \left(\frac{4 - 8 + 9}{13}\right) + \frac{-5}{8}$$

$$= \frac{5}{13} + \frac{-5}{8}$$

$$= \frac{40 - 65}{104}$$

$$= \frac{-25}{104}$$

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