Answer :

(i)

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

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

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

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

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

$$= \frac{-141}{12}$$

$$= \frac{-47}{4}$$

(ii)

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

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

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

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

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

$$= \frac{-77}{18}$$

(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)

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

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

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

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

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

(v)

$$\left(\frac{2}{3} + \frac{1}{3}\right) + \left(\frac{-4}{5} + \frac{2}{5}\right)$$

$$= \frac{3}{3} + \frac{-2}{5}$$

$$= \frac{15-6}{15}$$

$$= \frac{9}{15}$$

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

(vi)

$$\left(\frac{1}{8} + \frac{-5}{16}\right) + \left(\frac{5}{12} + \frac{7}{12}\right) + \left(\frac{2}{7} + \frac{9}{7}\right)$$

$$= \left(\frac{2-5}{16}\right) + \left(\frac{5+7}{12}\right) + \left(\frac{2+9}{7}\right)$$

$$= \frac{-3}{16} + \frac{12}{12} + \frac{11}{7}$$

$$= \frac{-63+336+528}{336}$$

$$= \frac{801}{336}$$

$$= \frac{267}{112}$$