



Rational Numbers Ex 1.4 Q3

Answer :

(i)

$$\frac{-3}{2} + \frac{5}{4} - \frac{7}{4}$$

Taking *the L.C.M.* of the denominators :

$$\frac{-6}{4} + \frac{5}{4} - \frac{7}{4}$$

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

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

$$= -2$$

(ii)

$$\frac{5}{3} - \frac{7}{6} + \frac{-2}{3}$$

Taking *the L.C.M.* of the denominators :

$$\frac{10}{6} - \frac{7}{6} + \frac{-4}{6}$$

$$= \frac{10-7+(-4)}{6}$$

$$= \frac{10-7-4}{6}$$

$$= \frac{-1}{6}$$

(iii)

$$\frac{5}{4} - \frac{7}{6} - \frac{-2}{3}$$

Taking *the L.C.M.* of the denominators :

$$\frac{15}{12} - \frac{14}{12} - \frac{-8}{12}$$

$$= \frac{15-14-(-8)}{12}$$

$$= \frac{15-14+8}{12}$$

$$= \frac{9}{12}$$

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

(iv)

$$\frac{-2}{5} - \frac{-3}{10} - \frac{-4}{7}$$

Taking *the L.C.M.* of the denominators :

$$\frac{-28}{70} - \frac{-21}{70} - \frac{-40}{70}$$

$$= \frac{(-28)-(-21)-(-40)}{70}$$

$$= \frac{-28+21+40}{70}$$

$$= \frac{33}{70}$$

(v)

$$\frac{5}{6} + \frac{-2}{5} - \frac{-2}{15}$$

Taking *the L.C.M.* of the denominators :

$$\frac{25}{30} + \frac{-12}{30} - \frac{-4}{30}$$

$$= \frac{25 + (-12) - (-4)}{30}$$

$$= \frac{25 - 12 + 4}{30}$$

$$= \frac{17}{30}$$

(vi)

$$\frac{3}{8} - \frac{-2}{9} + \frac{-5}{36}$$

Taking *the L.C.M.* of the denominators :

$$\frac{27}{72} - \frac{-16}{72} + \frac{-10}{72}$$

$$= \frac{27 - (-16) + (-10)}{72}$$

$$= \frac{27 + 16 - 10}{72}$$

$$= \frac{33}{72}$$

$$= \frac{11}{24}$$

***** END *****