



Rational Numbers Ex 1.2 Q3

Answer :

(i)

Additive inverse is the negative of the given number.

So, additive inverse of $\frac{-2}{17}$ is $\frac{2}{17}$.

(ii)

Additive inverse is the negative of the given number.

So, additive inverse of $\frac{3}{-11}$ is $\frac{3}{11}$.

(iii)

Additive inverse is the negative of the given number.

So, additive inverse of $\frac{-17}{5}$ is $\frac{17}{5}$.

(iv)

Additive inverse is the negative of the given number.

So, additive inverse of $\frac{-11}{-25}$ is $\frac{-11}{25}$.

Rational Numbers Ex 1.2 Q4

Answer :

(i)

Negative of $\frac{-2}{5}$ is $\frac{2}{5}$.

(ii)

Negative of $\frac{7}{-9}$ is $\frac{7}{9}$.

(iii)

Negative of $\frac{-16}{13}$ is $\frac{16}{13}$.

(iv)

Negative of $\frac{-5}{1}$ is $\frac{5}{1}$.

(v)

Negative value of 0 is 0.

(vi)

Negative of 1 is -1 .

(vi)

Negative of -1 is 1.

(i)

We have:

$$\begin{aligned} & \frac{2}{5} + \frac{7}{3} + \frac{-4}{5} + \frac{-1}{3} \\ &= \left(\frac{2}{5} + \frac{-4}{5} \right) + \left(\frac{7}{3} + \frac{-1}{3} \right) \\ &= \left(\frac{2-4}{5} \right) + \left(\frac{7-1}{3} \right) \\ &= \frac{-2}{5} + \frac{6}{3} \\ &= \frac{-6+30}{15} \\ &= \frac{24}{15} \\ &= \frac{8}{5} \end{aligned}$$

(ii)

We have:

$$\begin{aligned} & \frac{3}{7} + \frac{-4}{9} + \frac{-11}{7} + \frac{7}{9} \\ &= \left(\frac{3}{7} + \frac{-11}{7} \right) + \left(\frac{-4}{9} + \frac{7}{9} \right) \\ &= \left(\frac{3-11}{7} \right) + \left(\frac{-4+7}{9} \right) \\ &= \frac{-8}{7} + \frac{3}{9} \\ &= \frac{-72+21}{63} \end{aligned}$$

$$= \frac{-51}{63}$$

$$= \frac{-17}{21}$$

(iii)

We have:

$$\frac{2}{5} + \frac{8}{3} + \frac{-11}{15} + \frac{4}{5} + \frac{-2}{3}$$

$$= \left(\frac{2}{5} + \frac{4}{5} \right) + \left(\frac{8}{3} + \frac{-2}{3} \right) + \frac{-11}{15}$$

$$= \left(\frac{2+4}{5} \right) + \left(\frac{8-2}{3} \right) + \frac{-11}{15}$$

$$= \frac{6}{5} + \frac{6}{3} + \frac{-11}{15}$$

$$= \frac{18+30-11}{15}$$

$$= \frac{37}{15}$$

(iv)

We have:

$$\frac{4}{7} + 0 + \frac{-8}{9} + \frac{-13}{7} + \frac{17}{21}$$

$$= \left(\frac{4}{7} + \frac{-13}{7} \right) + \left(\frac{-8}{9} \right) + \frac{17}{21}$$

$$= \left(\frac{4-13}{7} \right) + \left(\frac{-8}{9} \right) + \frac{17}{21}$$

$$= \frac{-9}{7} + \frac{-8}{9} + \frac{17}{21}$$

$$= \frac{-81-56+51}{63}$$

$$= \frac{-86}{63}$$

*****END*****