Operations on Rational Numbers Ex 5.2 Q1

Answer :

(i) $\dfrac{5}{8} - \dfrac{3}{8} = \dfrac{2}{8}$

(ii) $\dfrac{4}{9} - \dfrac{-7}{9} = \dfrac{11}{9}$

(iii) $\dfrac{-9}{11} - \dfrac{-2}{11} = \dfrac{-9+2}{11} = \dfrac{-7}{11}$

(iv) $\dfrac{-4}{13} - \dfrac{11}{13} = \dfrac{-4-11}{13} = \dfrac{-15}{13}$

Operations on Rational Numbers Ex 5.2 Q2

Answer :

(i) $\dfrac{2}{3} - \dfrac{3}{5} = \dfrac{2\times5-3\times3}{15} = \dfrac{10-9}{15} = \dfrac{1}{15}$

(ii) $-\dfrac{4}{7} - \dfrac{2}{-3} = \dfrac{-4\times3+2\times7}{21} = \dfrac{-12+14}{21} = \dfrac{2}{21}$

(iii) $\dfrac{4}{7} - \dfrac{-5}{-7} = \dfrac{4-5}{7} = \dfrac{-1}{7}$

(iv) $-\dfrac{2}{1} - \dfrac{5}{9} = \dfrac{-2\times9-5}{9} = \dfrac{=-18-5}{9} = \dfrac{-23}{9}$

Operations on Rational Numbers Ex 5.2 Q3

Answer :

First number $= \frac{1}{3}$

Let the second number $= x$.

According to the question, we have

$\frac{1}{3} + x = \frac{5}{9}$

$\Rightarrow x = \frac{5}{9} - \frac{1}{3} = \frac{5-1\times3}{9} = \frac{5-3}{9} = \frac{2}{9}$

Operations on Rational Numbers Ex 5.2 Q4

Answer :

First number $= \frac{-12}{3}$

Let the second number $= x$.

Then, according to the question, we have

$\frac{-12}{3} + x = \frac{-1}{3}$

$\Rightarrow x = \frac{-1}{3} - \frac{-12}{3} = \frac{-1+12}{3} = \frac{11}{3}$

Operations on Rational Numbers Ex 5.2 Q5

Answer :

First number $= -5$

Let the second number $= x$.

Then, according to the question, we have

$-5 + x = \frac{-4}{3}$

$\Rightarrow x = \frac{-4}{3} - \frac{-5}{1} = \frac{-4+5\times3}{3} = \frac{-4+15}{3} = \frac{11}{3}$

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