

Rational Numbers Ex 1.3 Q6

Answer:

It is given that the sum of two rational numbers is -8, where one of the numbers is $\frac{-15}{7}$.

Let the other rational number be x.

$$\therefore x + \left(\frac{-15}{7}\right) = -8$$

$$\Rightarrow x = \frac{-8}{1} - \frac{-15}{7}$$

$$\Rightarrow x = \frac{-56}{7} - \frac{-15}{7}$$

$$= \frac{-56 - (-15)}{7}$$

$$= \frac{-56 + 15}{7}$$

$$= \frac{-41}{7}$$

Therefore, the other rational number is $\frac{-41}{7}$.

Rational Numbers Ex 1.3 Q7

Answer:

Let x be added to $\frac{-7}{8}$ so as to get $\frac{5}{9}$.

$$\therefore x + \frac{-7}{8} = \frac{5}{9}$$

$$\Rightarrow x = \frac{5}{9} - \frac{-7}{8}$$

$$\Rightarrow x = \frac{40}{72} - \frac{-63}{72}$$

$$\Rightarrow x = \frac{40 - (-63)}{72}$$

$$\Rightarrow x = \frac{40 + 63}{72} = \frac{103}{72}$$

Rational Numbers Ex 1.3 Q8

Answer:

Let x be added.

$$\therefore x + \frac{-5}{11} = \frac{26}{33}$$

$$\Rightarrow x = \frac{26}{33} - \frac{-5}{11}$$

$$\Rightarrow x = \frac{26}{33} - \frac{-15}{33}$$

$$\Rightarrow x = \frac{26 - (-15)}{33}$$

$$\Rightarrow x = \frac{26 + 15}{33}$$

$$\Rightarrow x = \frac{41}{33}$$