Rational Numbers Ex 1.7 Q12

Answer :

Let the number *be* x.

$$\therefore \quad \frac{-33}{16} \div x = \frac{-11}{4}$$

$$\text{or} \quad \frac{-33}{16} \times \frac{1}{x} = \frac{-11}{4}$$

$$\text{or} \quad \frac{1}{x} = \frac{-11}{4} \times \frac{16}{-33}$$

$$\text{or} \quad \frac{1}{x} = \frac{4}{3}$$

$$\text{or} \quad x = \frac{3}{4}$$

Thus, the number is $\frac{3}{4}$.

Rational Numbers Ex 1.7 Q13

Answer :

$$\left(\frac{-13}{5} + \frac{12}{7}\right) \div \left(\frac{-31}{7} \times \frac{-1}{2}\right)$$

$$= \frac{-13\times7+12\times5}{35} \div \frac{31}{14}$$

$$= \frac{-91+60}{35} \div \frac{31}{14}$$

$$= \frac{-31}{35} \times \frac{14}{31}$$

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

Rational Numbers Ex 1.7 Q14

Answer :

$$\left(\frac{65}{12}+\frac{12}{7}\right)\div\left(\frac{65}{12}-\frac{12}{7}\right)$$

$$=\frac{65\times7+12\times12}{84}\div\frac{65\times7-12\times12}{84}$$

$$=\frac{455+144}{84}\div\frac{455-144}{84}$$

$$=\frac{599}{84}\div\frac{311}{84}$$

$$=\frac{599}{84}\times\frac{84}{311}$$

$$=\frac{599}{311}$$

Rational Numbers Ex 1.7 Q15

Answer :

Cloth needed to prepare 24 trousers $= 54$ m

$\therefore$ *Length of the* cloth required for each trousers $= 54 \div 24 = \frac{54}{24} = \frac{9}{4}$ m $= 2\frac{1}{4}$ metres

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