Exercise 1D

Q2

Answer :

(i)

$\frac{3}{7} \times \frac{-5}{9} = \frac{-5}{9} \times \frac{3}{7}$

$\text{LHS} = \frac{3 \times (-5)}{7 \times 9}$

$= -\frac{15}{63}$

Simplifying, we get:

$-\frac{15}{63} = -\frac{15 \div 3}{63 \div 3}$

$= -\frac{5}{21}$

$\text{RHS} = \frac{-5}{9} \times \frac{3}{7}$

$= \frac{(-5) \times 3}{9 \times 7}$

$= \frac{-15}{63}$

Simplifying, we get:

$= \frac{-15 \div 3}{63 \div 3}$

$= -\frac{5}{21}$

LHS = RHS

(ii)

$\frac{-8}{7} \times \frac{13}{9} = \frac{13}{9} \times \frac{-8}{7}$

$\text{LHS} = \frac{-8}{7} \times \frac{13}{9} = \frac{(-8) \times 13}{7 \times 9} = -\frac{104}{63}$ $\text{RHS} = \frac{13}{9} \times \frac{-8}{7} = \frac{13 \times (-8)}{9 \times 7} = -\frac{104}{63}$ $\text{LHS} = \text{RHS}$

(iii)

$$\frac{-12}{5} \times \frac{7}{-36} = \frac{7}{-36} \times \frac{-12}{5}$$

$$\text{LHS} = \frac{-12}{5} \times \frac{7}{-36}$$
$$= \frac{(-12)\times 7}{5\times(-36)}$$
$$= \frac{84}{180}$$

Simplifying, we get:

$$= \frac{84 \div 12}{180 \div 12}$$
$$= \frac{7}{15}$$

$$\text{RHS} = \frac{7}{-36} \times \frac{-12}{5}$$
$$= \frac{7\times(-12)}{(-36)\times 5}$$
$$= \frac{84}{180}$$

Simplifying, we get:

$$= \frac{84 \div 12}{180 \div 12}$$
$$= \frac{7}{15}$$

LHS = RHS

(iv)

$$-8 \times \frac{-13}{12} = \frac{-13}{12} \times \left(-8\right)$$

$$\text{LHS} = -8 \times \frac{-13}{12}$$
$$= \frac{(-8)\times(-13)}{12}$$
$$= \frac{104}{12}$$

Simplifying, we get:

$$= \frac{104 \div 4}{12 \div 4}$$
$$= \frac{26}{3}$$

$$\text{RHS} = \frac{-13}{12} \times \left(-8\right)$$

$$= \frac{(-13)\times(-8)}{12}$$

$$= \frac{104}{12}$$

Simplifying, we get:

$$= \frac{104 \div 4}{12 \div 4}$$

$$= \frac{26}{3}$$

LHS = RHS

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