



Exercise 1H

Q2

Answer :

$$(b) \frac{-28}{15}$$
$$\frac{8}{-15} = \frac{-8}{15} \text{ and } \frac{4}{-3} = \frac{-4}{3}$$

Now, we have:

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

LCM of 15 and 3 is $(3 \times 5 \times 1)$, that is, 15

$$\begin{aligned} \frac{-8}{15} + \frac{-4}{3} &= \frac{1 \times (-8) + 5 \times (-4)}{15} \\ &= \frac{(-8) + (-20)}{15} \\ &= \frac{-28}{15} \end{aligned}$$

Q3

Answer :

$$\frac{7}{-26} = \frac{-7}{26}$$

Now, we have:

$$\left(\frac{7}{-26} + \frac{16}{39} \right) = \left(\frac{-7}{26} + \frac{16}{39} \right)$$

LCM of 26 and 39 is 1014, that is, $(29 \times 1 \times 36)$.

$$\begin{aligned} \text{(a) } \frac{11}{78} \\ \left(\frac{-7}{26} + \frac{16}{39} \right) &= \frac{39 \times (-7) + 26 \times 16}{1014} \\ &= \frac{(-273) + 416}{1014} \\ &= \frac{143}{1014} \\ &= \frac{11}{78} \end{aligned}$$

Q4

Answer :

$$(b) \frac{16}{7}$$

$$3 = \frac{3}{1} \text{ and } \frac{5}{-7} = \frac{-5}{7}$$

Now, we have:

$$\left(3 + \frac{5}{-7}\right) = \left(\frac{3}{1} + \frac{-5}{7}\right)$$

LCM of 1 and 7 is 7

$$\begin{aligned}\left(\frac{3}{1} + \frac{-5}{7}\right) &= \frac{7 \times 3 + 1 \times (-5)}{7} \\ &= \frac{21 + (-5)}{7} \\ &= \frac{16}{7}\end{aligned}$$

Q5.

Answer :

$$(d) \frac{-67}{8}$$
$$\frac{31}{-4} = \frac{-31}{4}$$

We have:

$$\left(\frac{31}{-4} + \frac{-5}{8} \right) = \left(\frac{-31}{4} + \frac{-5}{8} \right)$$

LCM of 4 and 8 is 8, that is, $(4 \times 1 \times 2)$.

$$\begin{aligned} \left(\frac{-31}{4} + \frac{-5}{8} \right) &= \frac{2 \times (-31) + 1 \times (-5)}{8} \\ &= \frac{(-62) + (-5)}{8} \\ &= \frac{-67}{8} \end{aligned}$$

Q6

Answer :

$$(b) \frac{-17}{20}$$

Let the required number be x .

Now,

$$\frac{7}{12} + x = \frac{-4}{15}$$

$$\Rightarrow x = \left(\frac{-4}{15} + \frac{-7}{12} \right)$$

$$= \frac{4 \times (-4) + 5 \times (-7)}{60}$$

$$= \frac{(-16) + (-35)}{60}$$

$$= \frac{-51}{60}$$

$$= \frac{-17}{20}$$

***** END *****