Exercise 2C

$= \left(\frac{1353}{2} \times \frac{2}{123}\right)$ [∵ Reciprocal of $\frac{123}{2} = \frac{2}{123}$]

$= \left(\frac{1353}{123}\right) = 11$

Hence, there are 11 students in the group.

13

Answer :

Quantity of milk given to each student $= \frac{2}{5}$ L

Total quantity of milk distributed among all the students = 24 L

∴ Number of students $= \left(24 \div \frac{2}{5}\right)$

$= \left(24 \times \frac{5}{2}\right)$ [∵ Reciprocal of $\frac{2}{5} = \frac{5}{2}$]

$= (12 \times 5) = 60$

Hence, there are 60 students in the hostel.

14

Answer :

Capacity of the small jug $= \frac{3}{4}$ L

Capacity of the bucket $= 20\frac{1}{4}$ L $= \frac{81}{4}$ L

∴ Required number of small jugs $= \left(\frac{81}{4} \div \frac{3}{4}\right)$

$= \left(\frac{81}{4} \times \frac{4}{3}\right)$ [∵ Reciprocal of $\frac{3}{4} = \frac{4}{3}$]

$= \left(\frac{81}{3}\right) = 27$

Hence, the small jug has to be filled 27 times to empty the water from the bucket.

15

Answer :

Product of the two numbers = $15\frac{5}{6} = \frac{95}{6}$

One of the numbers = $6\frac{1}{3} = \frac{19}{3}$

$\therefore$ The other number = $\left(\frac{95}{6} \div \frac{19}{3}\right)$

$= \left(\frac{95}{6} \times \frac{3}{19}\right)$ [$\because$ Reciprocal of $\frac{19}{3} = \frac{3}{19}$]

$= \left(\frac{5}{2}\right) = 2\frac{1}{2}$

Hence, the other number is $2\frac{1}{2}$.

16

Answer :

Product of the two numbers = 42

One of the numbers = $9\frac{4}{5} = \frac{49}{5}$

$\therefore$ The other number = $\left(42 \div \frac{49}{5}\right)$

$= \left(42 \times \frac{5}{49}\right)$ [$\because$ Reciprocal of $\frac{49}{5} = \frac{5}{49}$]

$= \left(\frac{6 \times 5}{7}\right) = \frac{30}{7} = 4\frac{2}{7}$

Hence, the required number is $4\frac{2}{7}$.

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