

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.

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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.

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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 = $\left(\frac{81}{4} \div \frac{3}{4}\right)$ [: 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.

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Answer:

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

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

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

= $\left(\frac{95}{6} \times \frac{3}{19}\right)$ [:: Reciprocal of $\frac{19}{3} = \frac{3}{19}$]
= $\left(\frac{5}{2}\right) = 2\frac{1}{2}$

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

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Answer:

Product of the two numbers = 42
One of the numbers = $9\frac{4}{5} = \frac{49}{5}$ \therefore The other number = $\left(42 \div \frac{49}{5}\right)$ $= \left(42 \times \frac{5}{49}\right) \qquad [\because \text{Reciprocal of } \frac{49}{5} = \frac{5}{49}]$ $= \left(\frac{6 \times 5}{7}\right) = \frac{30}{7} = 4\frac{2}{7}$

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

