Exercise 2C

Distance covered by Vikas in $7\frac{3}{4}$ h = $20\frac{2}{3}$ km

∴ Distance covered by him in 1 h = $\left(20\frac{2}{3} \div 7\frac{3}{4}\right)$ km

$= \left(\frac{62}{3} \div \frac{31}{4}\right)$ km

$= \left(\frac{62}{3} \times \frac{4}{31}\right)$ km

$= \left(\frac{2\times4}{3}\right)$ km $= \left(\frac{8}{3}\right)$ km $= 2\frac{2}{3}$ km

Hence, the distance covered by Vikas in 1 h is $2\frac{2}{3}$ km.

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Answer :

Cost of $8\frac{1}{2}$ kg of sugar = Rs $148\frac{3}{4}$

∴ Cost of 1 kg of sugar = Rs $\left(148\frac{3}{4} \div 8\frac{1}{2}\right)$

= Rs $\left(\frac{595}{4} \div \frac{17}{2}\right)$

= Rs $\left(\frac{595}{4} \times \frac{2}{17}\right)$ = Rs $\left(\frac{35}{2}\right)$ = Rs $17\frac{1}{2}$

Hence, the cost of 1 kg of sugar is Rs $17\frac{1}{2}$.

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Answer :

Cost of 1 notebook = Rs $7\frac{3}{4}$ = Rs $\frac{31}{4}$

∴ Number of notebooks purchased for Rs $69\frac{3}{4}$ = $\left(69\frac{3}{4} \div \frac{31}{4}\right)$

$=\left(\frac{279}{4} \div \frac{31}{4}\right)$

$=\left(\frac{279}{4} \times \frac{4}{31}\right)$ [∵ Reciprocal of $\frac{31}{4} = \frac{4}{13}$]

$=\left(\frac{279}{31}\right) = 9$

Hence, 9 notebooks can be purchased for Rs $69\frac{3}{4}$.

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Answer :

Cost of 1 ticket = Rs $10\frac{1}{2}$ = Rs $\frac{21}{2}$

Total amount collected by the boy = Rs $283\frac{1}{2}$ = Rs $\frac{567}{2}$

∴ Number of tickets sold = $\left(\frac{567}{2} \div \frac{21}{2}\right)$

$= \left(\frac{567}{2} \times \frac{2}{21}\right)$ [∵ Reciprocal of $\frac{21}{2} = \frac{2}{21}$]

$= \frac{567}{21} = 27$

Hence, the boy sold 27 tickets of the charity show.

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Answer :

Amount contributed by 1 student = Rs $61\frac{1}{2}$ = Rs $\frac{123}{2}$

Total amount collected = Rs $676\frac{1}{2}$ = Rs $\frac{1353}{2}$

∴ Number of students in the group = $\left(\frac{1353}{2} \div \frac{123}{2}\right)$

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