Time and Work Ex 11.1 Q21

Answer :

$\text{Earnings of } 25 \text{ men in } 10 \text{ days} = \text{Rs. } 1000$

$\therefore \text{ Earnings of } 25 \text{ men in } 1 \text{ day} = \text{Rs. } \frac{1000}{10} = \text{Rs. } 100$

$\therefore \text{ Earning of } 1 \text{ man in } 1 \text{ day} = \text{Rs. } \frac{100}{25} = \text{Rs. } 4$

$\therefore \text{ Earnings of } 1 \text{ men in } 15 \text{ days} = \text{Rs. } (15 \times 4) = \text{Rs. } 60$

$\therefore \text{ Earnings of } 15 \text{ men in } 15 \text{ days} = \text{Rs. } (60 \times 15)$

$= \text{Rs. } 900$

Time and Work Ex 11.1 Q22

Answer :

If Ashu works for 8 hours daily, he can finish the work in 18 days.

If he works for 1 hour daily, he can finish the work in (18×8) days or 144 days.

$\therefore$ Number of hours he should work daily to finish the work in 12 days $= \frac{144}{12}$

$= 12$

Time and Work Ex 11.1 Q23

Answer :

$\text{Number of garlands made by } 9 \text{ girls in } 1 \text{ hour } = \frac{135}{3} = 45$

$\text{Number of garlands made by } 1 \text{ girl in } 1 \text{ hour } = \frac{45}{9} = 5$

$\therefore \text{ Number of girls required to make } 270 \text{ garlands in } 1 \text{ hour } = \frac{270}{5} = 54.$

Time and Work Ex 11.1 Q24

Answer :

Time taken by the first tap to fill the cistern $= 8$ hours

Time taken by the second tap to fill the cistern $= 4$ hours

$\therefore$ Work done by the first tap in 1 hour $= \frac{1}{8}$

Work done by the second tap in 1 hour $= \frac{1}{4}$

$\therefore$ Work done by both the taps in 1 hour $= \frac{1}{8} + \frac{1}{4}$

$= \frac{1+2}{8} = \frac{3}{8}$

Thus, both the taps together will fill the cistern in $\frac{8}{3}$ hours or $2\frac{2}{3}$ hours.

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