Profit, Loss, Discount, Value Added Tax (VAT) Ex 13.1 Q11

Answer :

Let the cost price of one orange *be* Rs. C, and its selling price be Rs. S
Therefore, $16\mathrm{C} = 18\mathrm{S}$
$\mathrm{C} = \frac{18}{16}\,\mathrm{S}$
As cost price is more than *the* selling price,
$\mathrm{S.P.} = \left(\frac{100-\text{loss }\%}{100}\right)\mathrm{C.P}$
$\mathrm{S} = \left(\frac{100-\text{loss }\%}{100}\right)\mathrm{C}$
$\frac{\mathrm{S}}{\mathrm{C}} = \left(\frac{100-\text{loss }\%}{100}\right)$
$\frac{16}{18} = \left(\frac{100-\text{loss }\%}{100}\right)$
$\frac{1600}{18} = 100 - \text{loss }\%$
$\text{Loss }\% = 100 - \frac{1600}{18}$
$\text{Loss }\% = \frac{1800-1600}{18}$
$= \frac{200}{18} = \frac{100}{9}$
$= 11\,\frac{1}{9}$
Therefore, the loss percent is $11\,\frac{1}{9}\,\%$.

Profit, Loss, Discount, Value Added Tax (VAT) Ex 13.1 Q12

Answer :

Let the cost price of *the* motorcycle for Ravis *h be* Rs. x.
$\text{Loss }\% = 28\%$
Therefore, $\mathrm{SP} = \mathrm{CP}\left(\frac{100-\text{Loss }\%}{100}\right)$
$\mathrm{SP} = \text{Rs. } x\left(\frac{72}{100}\right)$
Selling price of the motorcycle for Ravish = Cost price of the motorcycle for Vineet
Money spent on repair *s* = Rs. 1680
Therefore, *t*otal cost price of the motorcycle for Vineet = Rs. $\left(\ x\left(\frac{72}{100}\right) + 1680\right)$
Selling price of the motorcycle for Vineet = Rs. 35910
$\text{Profit }\% = 12.5\%$
$\mathrm{SP} = \mathrm{CP}\left(\frac{\text{Profit }\%+100}{100}\right)$
$\Rightarrow 35910 = \left(\frac{72x}{100} + 1680\right)\left(\frac{12.5+100}{100}\right)$
$\Rightarrow 35910 \times 100 \times 100 = \left(72x + 168000\right)\left(112.5\right)$
$\Rightarrow 359100000 = 8100x + 18900000$
$\Rightarrow 340200000 = 8100x$
$\Rightarrow x = \text{Rs. } 42000$
Therefore, Ravis *h bought the motorcycle for* Rs. 42000

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