Exercise 10B

Q1

Answer :

Maximum marks of the examination = 750

Marks secured by Rupesh = 495

Percentage of marks secured = $\left(\frac{495}{750} \times 100\right)\% = 66\%$

Hence, Rupesh scored 66% in the examination.

Q2

Answer :

Total monthly salary = Rs 15625

Increase percentage = 12%

∴ Amount increase = 12% of Rs 15625

$= \text{Rs } \left(15625 \times \frac{12}{100}\right) = \text{Rs } 1875$

∴ New salary = Rs 15625 + Rs 1875

= Rs 17500

Hence, the new salary of the typist is Rs 17,500.

Q3

Answer :

Original excise duty on the item = Rs 950

Amount reduced on excise duty = Rs (950 − 760) = Rs 190

∴ Reduction percent $= \left(\frac{\text{Reduction amount}}{\text{Original value}} \times 100\right)$

$= \left(\frac{190}{950} \times 100\right) = 20$

Hence, the excise duty on that item is reduced by 20%.

Q4

Answer :

Let Rs x be the total cost of the TV set.

Now, 96% of the total cost of TV = Rs 10464

$\Rightarrow$ 96% of Rs x = Rs 10464

$\Rightarrow \left(\frac{96}{100} \times x\right) = 10464$

$\therefore x = \left(\frac{10464 \times 100}{96}\right) = 10900$

Hence, the total cost of the TV set is Rs 10900.

Q5

Answer :

Let the total number of students be 100.

Then, number of boys = 70

$\therefore$ Number of girls = (100 − 70) = 30

Now, total number of students when the number of girls is 30 = 100

Then, total number of students when the number of girls is 504 = $\left(\frac{100}{30} \times 504\right)$ = 1680

$\therefore$ Number of boys = (1680 − 504) = 1176

Hence, there are 1176 boys in the school.

Q6

Answer :

Let *x* kg be the amount of the required ore.

Then, 12% of *x* kg = 69 kg

$\Rightarrow \left(\frac{12}{100} \times x\right)$ kg = 69 kg

$\Rightarrow x = \left(\frac{69 \times 100}{12}\right)$ kg = 575 kg

Hence, 575 kg of ore is required to get 69 kg of copper.

Q7

Answer :

Let *x* be the maximum marks.

Pass marks = (123 + 39) = 162

Then, 36% of *x* = 162

$\Rightarrow \left(\frac{36}{100} \times x\right) = 162$

$\Rightarrow x = \left(\frac{162 \times 100}{36}\right) = 450$

∴ Maximum marks = 450

Q8

Answer :

Suppose that the fruit seller initially had 100 apples.

Apples sold = 40

∴ Remaining apples = (100 − 40) = 60

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