



Exercise 10B

Initial amount of apples if 60 of them are remaining = 100

Initial amount of apples if 1 of them is remaining = $\left(\frac{100}{60}\right)$

Initial amount of apples if 420 of them are remaining = $\left(\frac{100}{60} \times 420\right) = 700$

Hence, the fruit seller originally had 700 apples.

Q9

Answer :

Suppose that 100 candidates took the examination.

Number of passed candidates = 72

Number of failed candidates = $(100 - 72) = 28$

Total number of candidates if 28 of them failed = 100

Total number of candidates if 392 of them failed = $\left(\frac{100}{28} \times 392\right) = 1400$

Hence, the total number of examinees is 1400.

Q10

Answer :

Suppose that the gross value of the moped is Rs x .

Commission on the moped = 5%

Price of moped after deducting the commission = Rs $(x - 5\% \text{ of } x)$

$$= \text{Rs} \left(x - \frac{5x}{100} \right) = \text{Rs} \left(\frac{100x - 5x}{100} \right) = \text{Rs} \left(\frac{95x}{100} \right)$$

Now, price of the moped after deducting the commission = Rs 15200

Then, Rs $\left(\frac{95x}{100} \right) = \text{Rs } 15200$

$$\therefore x = \text{Rs} \left(\frac{15200 \times 100}{95} \right) = \text{Rs} (160 \times 100) = \text{Rs } 16000$$

Hence, the gross value of the moped is Rs 16000.

Q11

Answer :

Total quantity of gunpowder = 8 kg = 8000 g (1 kg = 1000 g)

Quantity of nitre in it = 75% of 8000 g

$$= \left(\frac{75}{100} \times 8000 \right) \text{ g} = 6000 \text{ g} = 6 \text{ kg}$$

Quantity of sulphur in it = 10% of 8000 g

$$= \left(\frac{10}{100} \times 8000 \right) \text{ g} = 800 \text{ g} = 0.8 \text{ kg}$$

∴ Quantity of charcoal in it = {8000 – (6000 + 800)} g

$$= (8000 - 6800) \text{ g}$$

$$= 1200 \text{ g} = 1.2 \text{ kg}$$

Hence, the amount of charcoal in 8 kg of gunpowder is 1.2 kg.

Q12

Answer :

Total quantity of chalk = 1 kg = 1000 g

Now, we have the following:

Quantity of carbon in it = 3% of 1000 g

$$= \left(\frac{3}{100} \times 1000 \right) = 30 \text{ g}$$

Quantity of calcium in it = 10% of 1000 g

$$= \left(\frac{10}{100} \times 1000 \right) \text{ g} = 100 \text{ g}$$

Quantity of oxygen in it = 12% of 1000 g

$$= \left(\frac{12}{100} \times 1000 \right) \text{ g} = 120 \text{ g}$$

Q13

Answer :

Let x be the total number of days on which the school was open.

Number of days when Sonal went to school = 219

Percentage of attendance = 75

Thus, 75% of $x = 219$

$$\Rightarrow \left(\frac{75}{100} \times x \right) = 219$$

$$\therefore x = \left(\frac{219 \times 100}{75} \right) = 292 \text{ days}$$

Hence, the school was open for a total of 292 days.

Q14

Answer :

Let the total value of the property be Rs x .

Percentage of commission = 3

Amount of commission = Rs 42660

Thus, 3% of Rs $x =$ Rs 42660

$$\Rightarrow \left(\frac{3}{100} \times x \right) = 42660$$

$$\therefore x = \left(\frac{42660 \times 100}{3} \right) = 1422000$$

Hence, the total value of the property is Rs 14,22,000.

Q15

Answer :

Total number of eligible voters = 60000

Number of voters who gave their votes = 80% of 60000

$$= \left(\frac{80}{100} \times 60000 \right) = 48000$$

***** END *****