RS Aggarwal Solutions for Class 8 Maths Chapter 10 Exercise 10.3: RS Aggarwal Solutions for Class 8 Maths Chapter 10 Exercise 10.3 provide a detailed approach to understanding profit and loss calculations. This exercise focuses on solving problems related to percentage-based profit and loss scenarios, offering detailed solutions to enhance students' grasp of the topic.

By working through these solutions students learn to calculate profit, loss, and percentage changes with accuracy. These solutions are designed to build students problem-solving skills and prepare them effectively for exams.

RS Aggarwal Solutions for Class 8 Maths Chapter 10 Exercise 10.3 Overview

RS Aggarwal Solutions for Class 8 Maths Chapter 10 Exercise 10.3 provide a detailed exploration of profit and loss problems involving percentage calculations. This exercise introduces students to various scenarios where they need to determine profit or loss percentages based on given costs and selling prices.

The problems are designed to enhance students' understanding of how to apply percentage formulas in real-life situations. For instance, students learn how to calculate the selling price needed to achieve a desired profit margin or determine the loss incurred when selling an item at a reduced price. Each solution includes clear, step-by-step explanations and calculations which help students develop a solid grasp of the concepts and improve their ability to solve similar problems independently.

RS Aggarwal Solutions for Class 8 Maths Chapter 10 Exercise 10.3 PDF

RS Aggarwal Solutions for Class 8 Maths Chapter 10 Exercise 10.3 PDF is now available below. By reviewing this PDF, students can gain a deeper understanding of how to apply percentage calculations to real-world scenarios involving profit and loss. For easy access and reference, the PDF link is provided below:

RS Aggarwal Solutions for Class 8 Maths Chapter 10 Exercise 10.3 PDF

RS Aggarwal Solutions for Class 8 Maths Chapter 10 Exercise 10.3 (Exercise 10C)

RS Aggarwal Solutions for Class 8 Maths Chapter 10 Exercise 10.3 are available below. This resource provide detailed solutions and explanations for problems related to operations on profit and loss.

(1) The list price of a refrigerator is Rs 14650. If 6% is charged as sales tax, find the cost of the refrigerator.

Solution: Cost of refrigerator = Rs 14650

ST = 6% of Rs 14650

$$\Rightarrow \text{ST} = \text{Rs}\left(14650 \times \frac{6}{100}\right) = Rs\ 879$$

$$\therefore \text{Bill amount} = \text{Rs}\ (14650 + 879) = \text{Rs}\ 15529$$

(2) Reena bought the following articles from a general store:

(i) 1 tie costing Rs 250 with ST @ 6%

Solution: $\text{ST} = \text{Rs}\left(250 \times \frac{6}{100}\right) = Rs\ 15$

$\therefore \text{Bill amount} = \text{Rs}\ (250 + 15) = \text{Rs}\ 265$

(ii) Medicines costing Rs 625 with ST @ 4%

Solution: $\text{ST} = \text{Rs}\left(625 \times \frac{4}{100}\right) = Rs\ 25$

$\therefore \text{Bill amount} = \text{Rs}\ (625 + 25) = \text{Rs}\ 650$

(iii) Cosmetics costing Rs 430 with ST @ 10%

Solution: $\text{ST} = \left(430 \times \frac{10}{100}\right) = Rs\ 43$

$\therefore \text{Bill amount} = \text{Rs}\ (430 + 43) = \text{Rs}\ 473$

(iv) Clothes costing Rs 1175 with ST @ 8%

Solution: $\text{ST} = \text{Rs}\left(1175 \times \frac{8}{100}\right) = Rs\ 94$

$\therefore \text{Bill amount} = \text{Rs}\ (1175 + 94) = \text{Rs}\ 1269$

Calculate the total amount to be paid by Reena.

Ans: The total amount = Rs (265 + 650 + 473 + 1269)= Rs 2657

(3) Tanvy bought a watch for Rs 1980 including VAT at 10%. Find the original price of the watch.

Solution: Let the original price of watch be Rs x.

$$\text{VAT} = 10\% \text{ of Rs x} = \text{Rs}\left(x \times \frac{10}{100}\right) = Rs\ \frac{x}{10}$$

$$\therefore \text{Price including VAT} = \text{Rs}\left(x + \frac{x}{10}\right) = Rs\ \frac{11x}{10}$$

$$\therefore \frac{11x}{10} = 1980$$

$$\Rightarrow 11x = 19800$$

$$\Rightarrow x = 1800$$

Hence, the original price is Rs 1800.

(4) Mohit bought a shirt for Rs 1337.50 including VAT at 7%. Find the original price of the shirt.

Solution: Let the original price of watch be Rs x.

$$\text{VAT} = 7\% \text{ of Rs x} = \text{Rs}\left(x \times \frac{7}{100}\right) = Rs\ \frac{7x}{100}$$

$$\therefore \text{Price including VAT} = \text{Rs}\left(x + \frac{7x}{100}\right) = Rs\ \frac{107x}{100}$$

$$\therefore \frac{107x}{100} = 1337.50$$

$$\Rightarrow \frac{107x}{100} = \frac{13375}{100}$$

$$\Rightarrow 107x = 133750$$

$$\Rightarrow x = 1250$$

Hence, the original price is Rs 1250.

(5) Karuna bought 10g of gold for Rs 15756 including VAT at 1%. What is the rate of gold per 10 g?

Solution: Let the original price of 10g gold be Rs x.

$$\text{VAT} = 1\% \text{ of Rs x} = \text{Rs}\left(x \times \frac{1}{100}\right) = Rs\ \frac{x}{100}$$

$$\therefore \text{Price including VAT} = \text{Rs}\left(x + \frac{x}{100}\right) = Rs\ \frac{101x}{100}$$

$$\therefore \frac{101x}{100} = 15756$$

$$\Rightarrow 101x = 1575600$$

$$\Rightarrow x = 15600$$

(6) Mohini purchased a computer for Rs 37960 including VAT at 4%. What is the original price of the computer?

Solution: Let the original price of the computer be Rs x.

$$\text{VAT} = 4\% \text{ of Rs x} = Rs\ \left(x \times \frac{4}{100}\right) = Rs\ \frac{x}{25}$$

$$\therefore \text{Price including VAT} = \text{Rs}\left(x + \frac{x}{25}\right) = Rs\ \frac{26x}{25}$$

$$\therefore \frac{26x}{25} = 37960$$

$$\Rightarrow 26x = 949000$$

$$\Rightarrow x = 36500$$

Hence, the original price of the computer is Rs 36500.

(7) Sajal purchased some car parts for Rs 20776 including VAT at 12%. What is the original cost of these spare parts?

Solution: Let the original price of the spare parts be Rs x.

$$\text{VAT} = 12\% \text{ of Rs x} = Rs\ \left(x \times \frac{12}{100}\right) = Rs\ \frac{3x}{25}$$

$$\therefore \text{Price including VAT} = Rs\ \left(x + \frac{3x}{25}\right) = Rs\ \frac{28x}{25}$$

$$\therefore \frac{28x}{25} = 20776$$

$$\Rightarrow 28x = 519400$$

$$\Rightarrow x = 18550$$

Hence, the original price of the spare parts is Rs 18550.

(8) The sale price of a TV set including VAT is Rs 27000. If the VAT is charged at 8% of the list price, what is the list price of the TV set?

Solution: Let the original price of the TV be Rs x.

$$\text{VAT} = 8\% \text{ of Rs x} = Rs\ \left(x \times \frac{8}{100}\right) = Rs\ \frac{2x}{25}$$

$$\therefore \text{Price including VAT} = Rs\ \left(x + \frac{2x}{25}\right) = Rs\ \frac{27x}{25}$$

$$\therefore \frac{27x}{25} = 27000$$

$$\Rightarrow 27x = 675000$$

$$\Rightarrow x = 25000$$

Hence, the original price of the TV is Rs 25000.

(9) Rohit purchased a pair of shoes for Rs 882 inclusive of VAT. If the original price of VCR be Rs 840, find the rate of VAT.

Solution: Let the rate of Vat be x%.

$$\text{Then, } 840 + x\% \text{ of } 840 = 882$$

$$\Rightarrow \left(\frac{x}{100} \times 840\right) = 882 - 840$$

$$\Rightarrow 840x = 4200$$

$$\Rightarrow x = 5$$

$$\therefore \text{Rate of VAT is } 5\%.$$

(10) Malti bought a VCR for Rs 19980 including VAT. If the original price of VCR be Rs 18500, find the rate of VAT.

Solution: Let the rate of VAT be x%.

Then, $18500 + x\%$ of $18500 = 19980$

$\Rightarrow \left(\frac{x}{100} \times 18500\right) = 19980 - 18500$

$\Rightarrow 18500x = 148000$

$\Rightarrow x = 8$

$\therefore$ Rate of VAT is 8%.

(11) The value of a car including VAT is Rs 382500. If the basic price of the car be Rs 340000, find the rate of vat on cars.

Solution: Let the rate of VAT be x%.

Then, $340000 + x\%$ of $340000 = 382500$

$\Rightarrow \left(\frac{x}{100} \times 340000\right) = 382500 - 340000$

$\Rightarrow 340000x = 4250000$

$\Rightarrow x = 12\frac{1}{2}$

$\therefore$ Rate of VAT is $12\frac{1}{2}\%$.

Benefits of RS Aggarwal Solutions for Class 8 Maths Chapter 10 Exercise 10.3

- **Clear Explanations**: The solutions provide step-by-step explanations of how to solve profit and loss problems. This helps students understand the process and logic behind each calculation.
- **Improved Understanding**: By working through detailed solutions students can better grasp the concepts of profit, loss, and percentage calculations which are important for real-life financial literacy.
- **Practice Opportunities**: The exercise covers a variety of problems, allowing students to practice different scenarios and strengthen their problem-solving skills.
- **Error Correction**: Students can use the solutions to check their work and identify any mistakes. This helps in correcting misunderstandings and improving accuracy.
- **Concept Reinforcement**: Repeated exposure to different types of problems in the solutions helps reinforce the core concepts and builds confidence in handling similar problems in exams.