ICSE Class 8 Maths Selina Solutions Chapter 7: The word "percent" comes from the Latin "per centum," which means "per hundred." It means 100 and is denoted by the symbol %. When we say 1%, we are referring to one part of a whole quantity or one out of 100. You will learn all the topics related to percentages and percents in chapter 7 of ICSE Class 8 Maths. Additionally, you will work through the exercise's slightly more difficult issues including the use of percentages.

To assist you in your study, we have made available the ICSE Class 8 Maths Selina Solutions Chapter 7 Percent and Percentage in PDF format. The professionals provide thorough answers to these queries in understandable terms. If you were not there in class, you can use this PDF to understand the challenges. To get the PDF, click the link provided below.

ICSE Class 8 Maths Selina Solutions Chapter 7 Overview

Chapter 7 of ICSE Class 8 Maths, covered in Selina Solutions, focuses on percentages, a fundamental concept in mathematics and everyday life. The solutions provided are meticulously crafted to simplify the understanding of percentages for students.

They include clear explanations and step-by-step solutions to exercises from the textbook, ensuring that students grasp the concept thoroughly. Through a variety of practice questions and examples, the solutions enable students to apply percentages in real-world contexts, enhancing their problem-solving skills.

Additionally, these solutions serve as a valuable resource for exam preparation, offering insights into typical question patterns and techniques for effective calculation. Overall, Selina Solutions for Chapter 7 play a crucial role in building a solid foundation in percentages, equipping students with confidence and proficiency in this essential mathematical concept.

ICSE Class 8 Maths Selina Solutions Chapter 7

Here we have provided ICSE Class 8 Maths Selina Solutions Chapter 7 for the ease of students so that they can prepare better for their upcoming exams -

Question 1

Evaluate:

(i) 55% of 160 + 24% of 50 – 36% of 150

Solution:

Equating them in the following form

$$= \frac{55\times160}{100} + \frac{24\times50}{100} - \frac{36\times150}{100}$$
$$= 11 \times 8 + 12 - 18 \times 3 = 88 + 12 - 54 = 46$$

=11×8+12−18×3=88+12−54=46

(ii) 9.3% of 500 – 4.8% of 250 – 2.5% of 240

Solution:

Equating them in the following form

$$= \frac{9.3\times500}{100} - \frac{4.8\times250}{100} - \frac{2.5\times240}{100}$$
$$= 9.3 \times 5 - 1.2 \times 10 - 0.5 \times 12$$
=46.5-12-6=46.5-18=28.5

Question 2.

(i) A number is increased from 125 to 150; find the percentage increase.

Solution:

Original value = 125

New value = 150

Increase = (150-125) =25

Increase

$$\% = \frac{25}{125} \times 100 = 20\%$$

(ii) A number is decreased from 125 to 100; find the percentage decrease.

Solution:

Original value = 125,

New value=100

Decrease =(125-100)=25

Question 3.

Find:

(i) 45 is what percent of 54?

Solution:

Let 45=x percent of

Let 45=x percent of

$$54 = \frac{54 \times x}{100}$$
$$\Rightarrow x = \frac{45 \times 100}{54} = \frac{5 \times 100}{6}$$
$$= \frac{250}{3} = 83\frac{1}{3}\%$$

∴ Required percentage

$$= 83\frac{1}{3}\%$$

Find (ii) 2.7 is what percent of 18?

Solution:

Let 2.7=x percent of 18

$$= \frac{18 \times x}{100}$$
$$\therefore x = \frac{2.7 \times 100}{18} = \frac{270}{18} = \frac{30}{2} = 15$$

∴ Required percentage =15%

Question 4.

(i) 252 is 35% of a certain number, find the number.

Solution:

(i) Let the number be x

By the given condition

$$252 = \frac{x \times 35}{100} = \frac{x \times 7}{20}$$
$$\therefore \quad x = \frac{252 \times 20}{7} = 36 \times 20 = 720$$

Hence, the required number = 720

(ii) If 14% of a number is 315; find the number.

Solution:

Let the number be x

By the given condition

$$315 = \frac{x \times 14}{100}$$
$$\therefore x = \frac{315 \times 100}{14} = \frac{45 \times 100}{2} = 45 \times 50 = 2250$$

Hence the required number = 2250.

Question 5.

Find the percentage change, when a number is changed from:

(i) 80 to 100

Solution:

Original number = 80

New number = 100,

Change = (100 – 80) = 20

∴ Percentage change (increase)

(ii) 100 to 80

Solution:

Original number = 100

New number = 80

Change (100 – 80) = 20

∴ Percentage change (decrease)

$=\frac{20}{100}\times 100=20\%$

(iii) 6.25 to 7.50

Solution:

Original number = 6.25

New number = 7.50

Change (increase) = (7.50 – 6.25) = 1.25

Question 6.

An auctioneer charges 8% for selling a house. If a house is sold for Rs.2,30,500; find the charges of the auctioneer.

Solution:

Selling price of the house = Rs.2,30,500

Rate of charges of the auctioneer = 8% of selling price

∴ Charges of the auctioneer = 8% of 2,30,500,

Question 7.

Out of 800 oranges, 50 are rotten. Find the percentage of good oranges.

Solution:

Rotten oranges = 50

Number of good oranges = 800 – 50 = 750

Percentage of good oranges

$$= \frac{750}{800} \times 100$$
$$= \frac{750}{8} = \frac{375}{4} = 93\frac{3}{4}\%$$

=7508=3754=9334%

Question 8.

A cistern contains 5 thousand liters of water. If 6% water is leaked. Find how many liters of water are left in the cistern.

Solution:

Water in the cistern = 5000 liters

Quantity of water leaked

=6100×500=300 L

Quantity of water left in the cistern

= (5000 – 300) liters = 4700 liters

Question 9.

A man spends 87% of his salary. If he saves Rs. 325; find his salary.

Solution:

Let salary =Rs x

$= \frac{87}{100}$ of x

$= \text{Rs} \cdot \frac{87x}{100}$

Saving =Rs.325

$x - \frac{87x}{100} = 325$

$\frac{100x-87x}{100} = 325 \Rightarrow \frac{13x}{100} = 325$

$x = \frac{325 \times 100}{13} \Rightarrow x = \frac{32500}{13}$

x=2500

$\therefore$ Salary =Rs.2500

Question 10.

(i) A number 3.625 is wrongly read as 3.265; find the percentage error.

Solution:

Correct number =3.625

Number wrongly read as =3.265

Error =3.625-3.265=0.360

$$\% \text{ Error } = \frac{0.360}{3.625} \times 100$$
$$= \frac{360}{3625} \times 100 = \frac{36000}{3625} = 9.93\%$$

Question 11.

In an election between two candidates, one candidate secured 58% of the votes polled and won the election by 18,336 votes.Find the total number of votes polled and the votes secured by each candidate.

Solution:

Since, winning candidate secured 58% of the votes polled.

∴ Losing candidate secured = (100-58)% of the votes polled = 42% of the votes polled

Difference of votes =58-42 =16% of the votes polled

We are given:

16% of votes polled = 18,336

$\frac{16}{100}$
of votes polled = 18,336

$\Rightarrow$ Votes polled

$= 18,336 \times \frac{100}{16}$
$\Rightarrow$ Votes polled

$= \frac{18,33,600}{16}$
$\Rightarrow$ Votes polled =1,14,600

$\therefore$ Votes secured by winning candidate

$= \frac{58}{100} \times 1,14,600 = 66,468$
Votes secured by losing candidate

$= \frac{42}{100} \times 1,14,600 = 48,132$
Votes polled =1,14,600

Votes secured by winning candidate =66,468

Votes secured by losing candidate =48,132

Question 12.

In an election between two candidates one candidate secured 47% of votes polled and lost the election by 12,366 votes. Find the total votes and die votes secured by the winning candidate.

Solution:

Since, the losing candidate secured 47% of the votes polled

Winning candidate secures votes = (100-47)% of the votes polled

= 53 % of the votes polled

Difference of votes =53-47 =6 % of the votes polled

We are given:

6% of the votes polled =12,366

6% of the votes polled =12,366

$\frac{6}{100} of the votes polled = 12,366$

Votes polled

$= 12,366 \times \frac{100}{6} = \frac{1236600}{6} = 2,06,100$

Votes secured by winning candidate

$= \frac{53}{100} \times 2,06,100 = 1,09,233$

$\therefore$ Votes polled =2,06,100

Votes secured by winning candidate = 1,09,233

Benefits of ICSE Class 8 Maths Selina Solutions Chapter 7

The Selina Solutions for ICSE Class 8 Maths Chapter 7 on offer several benefits:

Comprehensive Coverage: The solutions are designed to cover the entire syllabus comprehensively, ensuring that students grasp all concepts related to percentages thoroughly.

Clarity and Understanding: Each solution is structured to provide clear explanations and step-by-step solutions, helping students understand the underlying concepts easily.

Practice and Application: The solutions include a variety of practice questions that enable students to apply the concepts learned in different scenarios, reinforcing their understanding through practice.

Exam Preparation: By providing solutions to both textbook exercises and additional questions, these solutions aid students in preparing effectively for exams, familiarizing them with the types of questions they may encounter.

Self-Study Aid: They serve as an excellent resource for self-study, allowing students to independently review and consolidate their knowledge of percentages.

Accuracy and Reliability: Developed by experts in the subject, the solutions ensure accuracy and reliability, thereby building confidence in students regarding their understanding of percentages.

Additional Resources: Often, these solutions include extra tips, shortcuts, and alternative methods to solve problems, enriching students' problem-solving skills beyond what's typically covered in the textbook.