Important Questions for Class 8 Maths Chapter 7: The important questions for CBSE Class 8 Maths Chapter 7 Comparing Quantities are helpful because they focus on key concepts like percentages, ratios, and proportions.

These questions help students understand how to compare two quantities effectively in everyday situations, such as calculating discounts, finding profit or loss, and converting between percentages, fractions, and decimals. Solving these questions improves students' problem-solving skills and prepares them for real-world applications.

Important Questions for Class 8 Maths Chapter 7 Overview

Chapter 7 of Class 8 Maths **Comparing Quantities** focuses on the concepts of ratio, proportion, and percentages. This chapter introduces students to methods for comparing two or more quantities in a meaningful way.

Ratio is a way to express the relationship between two numbers showing how many times one value contains or is contained within the other. For example, if the ratio of boys to girls in a class is 3:2, it means for every 3 boys, there are 2 girls. Understanding ratios helps in comparing different quantities like money, distances, and parts of a whole.

Proportion deals with the equality of two ratios. If two ratios are equal, they form a proportion.

Percentages are another way to express ratios and proportions, but specifically as a part of a hundred. The concept of percentage is crucial for comparing quantities like discounts, interest rates, profit, and loss. Understanding percentages helps in analyzing financial situations and making decisions based on them.

The chapter includes important questions that cover problems related to finding ratios, solving proportion problems, converting between percentages and fractions, and applying these concepts to real-life scenarios. By practicing these questions, students improve their mathematical skills, gain a better understanding of ratio and proportion, and learn to apply percentages in various contexts.

Important Questions for Class 8 Maths Chapter 7 PDF

Important Questions for Class 8 Maths Chapter 7 Comparing Quantities are available in a PDF format. This resource includes a collection of crucial questions covering topics such as ratios, proportions, and percentages.

The detailed solutions provided for each question make it a valuable tool for exam preparation and revision. By solving these problems, students can strengthen their problem-solving skills and gain confidence in handling real-world mathematical applications. The PDF link available

below allows students to easily access and download these important questions for their study and practice.

Important Questions for Class 8 Maths Chapter 7 PDF

Important Question Class 8 Maths Chapter 8 Comparing Quantities

Here are important questions from Chapter 8 Comparing Quantities for Class 8 Maths along with their solutions:

Q.1. If the ratio of the number of boys to girls in a class is 5:3, find the number of boys and girls if there are 30 students in total.

Solution:

Let the number of boys be 5x and girls be 3x. Total = 5x + 3x = 30. x=3x = 3x=3. Boys = 15, Girls = 9.

Q.2. A shopkeeper marks the price of an article 25% above the cost price and allows a discount of 10% on the marked price. Find the selling price of the article.

Solution:

Marked Price = 125, Discount = 12.5. Selling Price = 112.5.

Q.3. If the price of an article increases by 20% and then decreases by 10%, what is the net percentage change in its price?

Solution:

Increase by 20% gives new price = 120. Decrease by 10% gives final price = 108. Net change = 8%.

Q.4. A person invested Rs. 8000 in two schemes A and B. He invested twice as much in A as in B. How much did he invest in each scheme?

Solution:

Let x be invested in B. A = 2x.

Total = 8000. x=2666.67x = 2666.67x=2666.67. A = 5333.33, B = 2666.67.

Q.5. If 72% of 25 students like maths, find out the number of students who do not like mathematics?

Solution:

Given, 72% of 25 students like maths.

Hence, 72% of 25 = (72/100) × 25 = 18 students

Now, from 25 students, 18 students like maths

Thus, the number of students who do not like maths = 25 – 18 = 7 students

Q.6. A person goes shopping and spends 75% of his money. If he is now left with Rs. 600, find out how much he had in the beginning.

Solution:

Let “x” be the initial amount that he had in the beginning.

As per the given question, the person spent 75% of Rs.x and is left with Rs. 600.

So, the amount he spent = x – 600

=> 75% of x = x – 600

=> (75/100) × x = x – 600

=> 75x = 100x – 60,000

=>25x = 60,000

Or, x = 2400.

Thus, the person had Rs. 2400 initially.

Q.7. A shopkeeper bought two phones for Rs. 8,000 each. After selling the phones, there was a loss of 4% on the 1st phone while a profit of 8% on the 2nd phone. Calculate the overall gain or loss per cent on the whole transaction.

Solution:

As the shopkeeper bought both phones at Rs. 8000 each.

Total cost price = Rs. 16,000

Assume that the cost price of the 1st phone is Rs. 100

Consider the deal of phone 1,

As it is given, there is 4% loss, the selling price will be = Rs. 96

For CP = 100, SP = 96

So, for CP = 1, SP = 96/100

Now, given, CP = 8000

Hence, SP = 96/100 × 8000 = 7680

Thus, the selling price of 1st phone = Rs. 7680

Consider the deal of phone 2, there is an 8% profit.

Hence, the selling price will be = Rs. 108

For CP = 100, SP = 108

So, for CP = 1, SP = 108/100

Now, given CP = 8000

hence, SP = 108/100 × 8000 = 8640

Thus, the selling price of 2nd phone = Rs. 8640

Here, the total selling price will be = Rs. 7680 + Rs. 8640 = 16320

Now, it can be seen that,

Total selling price > total cost price i.e. Rs. 16320 > Rs. 16000

So, there is a profit of Rs. (16320 – 16000) = Rs. 320

Now, the overall profit percentage will be-

Profit% = (Profit/Total Cost Price) × 100 = (320/16000) × 100 = 2

Therefore, there is a total of 2% profit for the whole transaction.

Q.8. 72% of 25 students are good in mathematics. How many are not good in mathematics?

Solution:

Total number of students = 25
Number of good students in mathematics = 72% of 25
=72100×25=18
∴ Number of students not good in mathematics = 25 - 18 = 7

Q.9. If apples are bought at 11 for RS 10 & sold at 10 for RS 11.

Solution:

If apples are bought at 11 for Rs. 10 and sold at 10 for Rs. 11, the profit percentage is approximately 21%.

The calculation is as follows:

- **Cost Price (CP)**: Rs.10/11 = Rs.0.9091 (approx)
- **Selling Price (SP)**: Rs.11/10 = Rs.1.1
- **Profit per apple**: Rs.1.1 - Rs.0.9091 = Rs.0.1909
- **Profit percentage**: (Rs. 0.1909/Rs.0.9091) × 100 = 21% (approx)

The formula for profit or loss percentage is:

- Profit or Loss Percentage = (Profit or Loss / Cost Price) × 100

Q.10. A furniture seller bought 20 tables for 120000 Rupees and sold this at a profit equal to the selling price of 4 tables. Find the SP of one table.

Solution:

Cost price of 20 tables is 120000 Rs
so cost of 1 table 120000/20=6000 Rs
let selling price of 1 table is x rupees
selling price of 4 tables is 4x rupees according to question profit equal to the selling price of 4 tables
so profit =4x
now we know SP-CP=profit
or 20x-120000=4x
or 16x=120000
or x= 120000/16=30000/4=7500 rupees
so SP of 1 table is 7500 rupees

Benefits of Solving Important Questions for Class 8 Maths Chapter 7

- **Understanding Key Concepts:** These questions cover essential topics like ratios, percentages, and proportions, helping students to grasp the underlying concepts thoroughly.

- **Exam Preparation:** Practicing these questions prepares students for their exams by familiarizing them with the types of questions that are likely to appear. This boosts confidence and improves their problem-solving skills.
- **Application of Concepts:** The questions often require applying mathematical concepts to real-world problems, which enhances critical thinking and the ability to solve practical problems.
- **Improved Problem-Solving Skills:** Working through different types of questions helps students improve their problem-solving speed and accuracy. They learn how to approach and solve complex questions more effectively.
- **Building Mathematical Foundation:** Regular practice of these important questions strengthens the foundational knowledge necessary for higher-level mathematics. It helps in retaining concepts and formulas better.
- **Identifying Strengths and Weaknesses:** By solving these questions, students can identify areas where they are strong and where they need to improve, allowing them to focus their study efforts more efficiently.