



WORK SHEET

CLASS

8

SUBJECT: Mathematics

LESSON FOR FA-3

Comparing Quantities

EXERCISE 8.1

1. If 20% of x is 80, find x .
2. 44% of the students of a class are girls. If there are 6 less girls than boys, how many students are there in the class?
3. The population of a town, at present, is 37380 and this is 5% more than it was one year ago. What was its population that year?
4. 40% marks are pass marks in an examination. Kiran gets zero mark and fails by 20 marks. Find the maximum marks.
5. A woman bought certain number of eggs, out of which 4% were bad. After selling 75% of the remaining, she had 96 eggs. Find the number of eggs she bought.
6. A number is first increased by 20% and then the new number so obtained is decreased by 20%. Find the net increase or decrease per cent.
7. Ramesh's income is 20% less than that of Suresh's income. By what per cent is Suresh's income more than that of Ramesh?
8. The salary of an employee in a company has been increased by 25%. By what per cent, the new salary be decreased to restore the original salary?
9. 85% of the total number of students of a school did not go for a picnic on a certain day. If the number of students who did not go for the picnic was 935, find the total number of students in the school.
10. In an election, the winning candidate received 31488 votes which represented 48% of the electorate. The only other candidate received votes which formed 22% of the electorate. Calculate (a) the number of electorate and (b) the number of people who did not cast their vote.

EXERCISE 8.2

1. The marked price of a book is ₹ 110. The shopkeeper gives 10% discount on it. What is the selling price of the book?
2. The marked price of an article is ₹ 75. If it is sold at ₹ 60, what is the discount rate?
3. A T.V. set was sold for ₹ 17820 after giving discount of 10%. What was the marked price of the T.V. set?
4. A shopkeeper was selling all his items at 20% discount. If Rohit bought a coat which was marked at ₹ 2400, how much did he pay for the coat?
5. The marked price of a frock is ₹ 440. A discount of 15% is allowed on sales. What is the amount of discount on it and what is its selling price?

EXERCISE 8.3

- An article is bought for ₹ 250 and sold for ₹ 375. Find the gain percentage.
- An article is bought for ₹ 400 and sold at a gain of 20%. Find the selling price of the article.
- An article is sold for ₹ 600 at a loss of 20%. Find the cost price of the article.
- A man sold two pens at ₹ 99 each. He sold one at a loss of 10% and the other at a gain of 10%. Find his loss or gain per cent.
- By selling an article for ₹ 1530, Ram loses 10%. For how much should he sell it to gain 20%?
- If the cost price of 10 articles is equal to the selling price of 8 articles, find the loss or gain percentage.
- If the cost price of 8 articles is equal to the selling price of 10 articles, find the loss or gain per cent.
- Jaipal purchased articles for ₹ 3200 and sold one-fourth of it at a loss of 10% and one-half of it at a gain of 5%. Find the selling price of the remaining articles to gain 20% on the whole.
- A piano is marked for sale at ₹ 13500. The dealer allows 6% discount and then makes a profit of 25% on the cost price. Find the cost price of the piano.
- Vineeta sells sarees. She allows 5% discount on the marked price and still gains 10%. Find the marked price of a saree which costs her ₹ 950.

EXERCISE 8.4

- Kiran purchases a sewing machine marked for ₹ 3270. If the rate of VAT is 10%, find the amount which she has to pay for buying the machine.
- The cost of a chair at a shop was ₹ 450. The VAT charged was 5%. Find the bill amount.
- Find the buying price of each of the following items when 5% VAT is imposed on the purchase of the following:
 - A towel of ₹ 110
 - A pack of three soaps at ₹ 135
 - 5 kg of sugar at ₹ 25 per kg
- Kiran purchased an article for ₹ 5400 including 8% VAT. Find the price of the article excluding VAT.

EXERCISE 8.5

- Find the number of conversion periods and the rate for each conversion period for each of the following:
- A sum taken for $1\frac{1}{2}$ years at 10% per annum compounded half yearly.
 - A sum taken for 2 years at 12% per annum compounded half yearly.
- A sum of ₹ 20000 is borrowed by Meena for 2 years at 8% compounded annually. Find the amount she has to pay at the end of 2 years.
- What amount is to be paid on a loan of ₹ 12000 for $1\frac{1}{2}$ years at 10% per annum compounded half yearly?
- Find the amount to be paid at the end of 2 years on ₹ 2400 at 5% per annum:
- Compounded annually
 - Compounded half yearly
- Find the difference between the compound interest and the simple interest for 2 years on ₹ 8000 at 6% per annum compounded annually.

MCQ

SHARPEN Your Understanding



8th std. - Mathematics

Comparing Quantities (FA-3)

Here are ten multiple choice questions. Each question has four possible answers, of which some are correct. Choose the correct ones.

1. An article marked at ₹ 50 is sold for ₹ 45. What is the rate of discount?
 - (a) 5%
 - (b) 10%
 - (c) 15%
 - (d) 20%
2. Swati paid ₹ 214 for a pair of shoes worth ₹ 200. What is the rate of VAT charged?
 - (a) 14%
 - (b) 7%
 - (c) 28%
 - (d) 3.5%
3. The compound interest on ₹ 3000 at 5% per annum, compounded annually for 2 years is:
 - (a) ₹ 10
 - (b) ₹ 305
 - (c) ₹ 307.50
 - (d) ₹ 3307.50
4. If 72% of 250 students in a class are interested in English, how many students are not interested in English?
 - (a) 28 students
 - (b) 222 students
 - (c) 70 students
 - (d) 180 students
5. A fan was sold for ₹ 510 after allowing 15% discount. What was its actual selling price?
 - (a) ₹ 600
 - (b) ₹ 525
 - (c) 586.50
 - (d) ₹ 433.50
6. A shirt was sold for ₹ 880 including 10% VAT. What was its price before VAT was added?
 - (a) ₹ 890
 - (b) ₹ 870
 - (c) ₹ 800
 - (d) ₹ 810
7. What is the difference between S.I. and C.I. on a sum of ₹ 1000 at 10% for 2 years?
 - (a) No difference
 - (b) ₹ 210
 - (c) ₹ 200
 - (d) ₹ 10
8. A sum is lent for one year at 16% p.a. If interest is compounded after every three months, how many times will interest be charged in one year?
 - (a) One time
 - (b) Two times
 - (c) Three times
 - (d) Four times
9. A machine worth ₹ 12000 is depreciated by 10% per year. What will be its value after two years?
 - (a) ₹ 13200
 - (b) 12010
 - (c) ₹ 10800
 - (d) ₹ 9720
10. By what per cent is 2000 less than 2400?
 - (a) 4%
 - (b) $12\frac{1}{2}\%$
 - (c) $16\frac{2}{3}\%$
 - (d) 20%