

## CHAPTER 8

# COMPARING QUANTITIES

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### QUESTIONS

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1. Find the ratio of 5 paise to Rs. 25.
2. Find the ratio of speed of a car and truck travelling 150 km in 3 hours and 120 km in 4 hours respectively.
3. Convert the ratio 1:4 into percent.
4. Radhika earned Rs. 16,000 in a month. She saves 20% of her income. How much does she spend?
5. Find the ratio of 5m to 10 mm.
6. On Monday, if  $\frac{1}{2}$  of number of students of class VIII are in a computer room,  $\frac{1}{4}$  are in art room and rest 12 students are in playground. What is the total number of students in a class.
7. The cost of 6 pens is Rs. 72. What would be the cost of 10 such pens?
8. If in a class of 40 students, 70% of students are girls then what is the number of boys in the class.
9. Divide 95 chocolates among Rahul and Rekha in the ratio of 2:3. How many chocolate each will get?
10. Last year price of mangoes was Rs. 30 per kg. This year the price of mangoes has increased by 30%. What is the price now?
11. Mrs. Sunita has got 20% increase in her salary. If her salary was Rs. 18000. What will be her new salary?
12. The price of a computer is Rs. 48,000. The sales tax charged was 4%, what is the amount to be payed by Mr. Gupta?
13. Vijay has bought a motor bike for Rs. 32,400 including 8% VAT. What is the price of motorbike before VAT.

14. The list price of washing machine is Rs. 26,000. A discount of 10% was given by the shopkeeper to attract the customers. How much money does one has to pay?
15. In off-season a company announced 25% discount on A.C. to clear their stock. If Mr. Gupta has paid Rs. 22,500 for the A.C. what was the original price for A.C.
16. Find 50% of Rs. 728.
17. 25% of  $x = 250$ . Find  $x$ .
18.  $x\%$  of 360 = 72. Find  $x$
19. Express 25% as a fraction,
20. Express  $\frac{4}{25}$  as a percentage.
21. Find 30% of 600.
22. Express  $\frac{42}{50}$  as a percentage.
23. A fruit seller bought a basket containing 2050 oranges out of which 41 oranges were rotten. What percentage of oranges were rotten?
24. In a school there were 810 students 90% of them went to a picnic. How many students went to the picnic?
25. Express 0.295 as a percentage.
26. Ankita bought a book for Rs. 450 and after two months she sold it for Rs. 360 to her friend. Find the loss percentage.
27. By selling a car for Rs. 44,000 a man made a profit of 10%. At what price did he buy the car?
28. A whole sale dealer observed that cost of 45 pants of equal to selling price of 30 pants. What is his profit percent?
29. C.P. of 360 books = S.P. of 270 books. Find profit %.
30. Ramesh scored 445 marks out of 500. What percent of marks he scored?
31. Find (25% of 600) – (20% of 450)
32. Seema purchased a shirt for Rs. 250 a frock for Rs. 350 and a jeans for Rs. 650. She paid Rs. 1000 for all the three items. What percentage discount she got?
33. Anil bought a quilt for Rs. 1200 and sold it at a profit of 15%. At what price did he sell the quilt?
34. By selling a chair for Rs. 880.00, Rohit loses 20%, For what price Rohit bought the chair.
35. Selling price of 25 painting is equal to cost price of 35 paintings. Find the profit percentage.

36. Profit percent =  $\frac{\text{Total Profit}}{\square} \times 100$ .
37. Complete it S.P. =  $\frac{100 + \text{Profit}\%}{\square} \times C.P.$
38. Find the missing number :  $C.P. = \frac{100}{\square - \text{Loss}\%} \times S.P.$
39. Which is more : A discount of (50% + 20%) or discount (70%)?
40. Complete it. (50% + 40%) = \_\_\_\_\_% discount
41. At what price does Poonam sell her T.V. set which she bought for Rs. 5000 so as to make a profit of 20%?
42. Which is more : (90% of 800) or (70% of 1100)?
43. Find the amount Preeti has to pay to the bank after 2 years at 4% per annum on Rs. 625. If the Interest is compounded annually.
44. Ragani borrow a sum of Rs. 8000 from Seema at 5% per annum for 3 years. How much money she has to return to Seema?
45. Find the difference between simple interest and compound interest on Rs. 1000 for 2 years at 10% per annum.
46. Find the money Raj borrowed from his friend if he paid Rs. 72900 to him after 2 years at 8% per annum compounded annually.
47. Seema purchased a washing machine for Rs. 10,000 at credit at 10% for 2 years. What amount she has to pay after 2 years if interest in compounded annually?
48. Compound interest on a certain sum for 2 years at  $12\frac{1}{2}\%$  per annum is Rs. 170. Find the sum.
49. At what rate of interest (Compound) per annum will Rs. 625 amount to 784 in a 2 years.
50. At what rate percent compound interest per annum will Rs. 12500 amount to Rs. 21600 in 3 years?

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### ANSWERS

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|------------|---------------|
| 1. 1 : 500 | 2. 5 : 3      |
| 3. 25%     | 4. Rs. 12,800 |
| 5. 500 : 1 | 6. 48         |

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|-----------------------|-------------------|
| 7. Rs. 120            | 8. 12 Boys        |
| 9. 38 and 57          | 10. Rs. 39        |
| 11. Rs. 21,600        | 12. Rs. 49,920    |
| 13. Rs. 30,000        | 14. Rs. 23,400    |
| 15. Rs. 30,000        | 16. Rs. 364       |
| 17. 1000              | 18. $x = 20$      |
| 19. $\frac{1}{4}$ .   | 20. 16%           |
| 21. 180               | 22. 84%           |
| 23. 2%                | 24. 729           |
| 25. 29.5%             | 26. 20%           |
| 27. Rs. 40,000        | 28. 50%           |
| 29. $\frac{100}{3}$ % | 30. 89%           |
| 31. 60                | 32. 20%           |
| 33. Rs. 1380          | 34. Rs. 1100      |
| 35. 40%               | 36. (C.P.)        |
| 37. 100               | 38. 100           |
| 39. 70%               | 40. 70%           |
| 41. Rs. 6,000         | 42. (70% of 1100) |
| 43. Rs. 676           | 44. Rs. 9261      |
| 45. Rs. 10            | 46. Rs. 62500     |
| 47. Rs. 12,100        | 48. 640           |
| 49. 12%               | 50. 20%           |

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### TEST YOUR KNOWLEDGE

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- Two numbers are in the ratio 3 : 4 and their sum is 84. Find the numbers.
- Find the ratio of 15 min. to 1 hour.
- The cost price of a table is Rs. 1500 and gain is 12% what is its selling price.
- Find the discount percent when marked price is Rs. 900 and selling price is Rs. 873.
- What is 8% of 450?

6. 25% children of a class of 48 like to have milk in the morning. How many children does not like to have milk in the morning.
7. The cost price of 10 pencils is equal to the selling price of 8 pencils. What is the profit percentage?
8. At what rate percent compounded annually Rs. 1000 amount to Rs. 1331 in 3 years.
9. What will be difference between compound interest and simple interest on Rs. 2000 at 10% for 2 years.
10. In how much time will a sum of money double itself, if invested at 5% simple interest per annum.

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## ANSWERS

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|-------------|---------------|
| 1. 36, 48   | 2. 1 : 4      |
| 3. Rs. 1680 | 4. 3%         |
| 5. 36       | 6. 36         |
| 7. 25%      | 8. 10%        |
| 9. Rs. 20   | 10. 20 years. |