



MATHS

BOOKS - ASHOK PUBLICATION ASSAM

Comparing Quantities



1. Find the ratio of the following.

Speed of a cycle 15 km per hour to the speed

of scooter 30 km per hour.



4. Convert the following ratios to percentages.

3:4



5. Convert the following ratios to percentages.

2:3



6. 72% of 25 students are good in mathematics. How many are not good in mathematics?



7. A football team won 10 matches out of the total number of matches they played. If their win percentage was 40, then how many matches did they play in all?



8. If Chameli had Rs 600 left after spending 75% of her money, how much did the have in the beginning?



9. If 60% people in a city like cricket, 30% like football and the remaining like other games, then what per cent of the people like other games? If the total number of people are 50

lakh, find the exact number who like each type

of game.



10. A man got a 10% increase in his salary. If his

new salary is Rs 1,54,000. Find his orginal salary.



11. On Sunday 845 people went to the Zoo. On Monday only 169 people went. What is the per cent decrease in the people visiting the Zoo on Monday?

Watch Video Solution

12. A shopkeeper buys 80 articles for Rs 2,400 and sells them for a profit of 16%. Find the selling price of one article.

13. The cost of an article was Rs 15,500. Rs 450 were spent on its repairs. If it is sold for a profit of 15%, find the selling price of the article.

Watch Video Solution

14. A VCR and TV were bought for Rs. 8,000 each. The shopkeeper made a loss of 4% on the VCR and a profit of 8% on the TV. Find the gain or loss per cent on the whole transaction.



15. During a sale, a shop offered a discount of 10% on the marked prices of all the items. What would a customer have to pay for a pair of jeans marked at Rs 1450 and two shirts marked at Rs. 850 each?



16. A milkman sold two of his buffaloes for Rs 20,000 each. On one he made a gain of 5% and on the other a loss of 10%. Find his overall gain or loss.

Watch Video Solution

17. The price of a TV is Rs 13,000. The sales tax

charged on it the rate of 12%. Find the amount

that Vinod will have to pay if he buys it.

18. Arun bought a pair of shates at a sale where the discount given was 20%. If the amount he pays is Rs 1,600 found the marked price.

Watch Video Solution

19. I purchased a hari-dryer for Rs. 5,400 in cluding 8% VAT. Find the price before VAT was added.

20. Calculate the amount and compound interest on.

Rs. 10,800 for 3 years at $12rac{1}{2}\,\%$ per annum

compounded annually.

Watch Video Solution

21. Calculate the amount and compound interest on.



23. Calculate the amount and compound interest on.

8,000 for 1 year at 9% per annum compounded

half yearly.

Watch Video Solution

24. Calculate the amount and compound interest on.

Rs 10,000 for 1 year at 8% per annum compounded half yearly.



25. Kamala borrowed Rs 26,400 from a Bank to buy a scooter at a rate of 15% p.a. compounded yearly. What amount will she pay at the end of 2 years and 4 months to clear the loan?

Watch Video Solution

26. Fabina borrows Rs 12,500 at 12% per annum for 3 years at simple interest and

Radha borrows the same amount for the same period at 10% per annum, compounded annually, Who pays more interest and by how much?



27. I borrowed Rs 12,000 from Jamshed at 6% per annum simple interest for 2 years. Had I borrowed this sum at 6% per annum compound interest, what extra amount would I have to pay?





28. Vasudevan invested Rs 60,000 at an interest rate of 12% per annum compounded half yearly. What amount would be get after 6 months?

Watch Video Solution

29. Vasudevan invested Rs 60,000 at an interest rate of 12% per annum compounded

half yearly. What amount would be get

after 1 year?



30. Arif took a loan of Rs 80,000 from a bank. If the rate of interest is 10% per annum, find the difference in amounts he would be paying after $1\frac{1}{2}$ years if the interest is (i) compounded annually and (ii) compounded half yearly. **31.** Arif took a loan of Rs 80,000 from a bank. If the rate of interest is 10% per annum, find the difference in amounts he would be paying after $1\frac{1}{2}$ years if the interest is (i) compounded annually and (ii) compounded half yearly.

Watch Video Solution

32. Maria invested Rs 8,000 in a business. She would be paid interest at 5% per annum

compounded annually. Find

The amount credited against her name at the

end of the second year.

Watch Video Solution

33. Maria invested Rs 8,000 in a business. She would be paid interest at 5% per annum compounded annually. Find

(i) The amount credited against her name at the end of the second year. (ii)The interest for the 3rd year.



34. Find the amount and the compound interest on Rs 10,000 for 1 and a half years at 10% per annum, componded half yearly. Would his interest be more than the interest he would get if it was compounded annually?

Watch Video Solution

35. Find the amount which Ram will get on Rs 4096, if he gave it for 18 months at $12\frac{1}{2}$ %

per annum, interest being compounded half

yearly.



36. The population of a place increased to

54,000 in 2003 at a rare of 5% per annum

find the population in 2001

37. The population of a place increased to 54,000 in 2003 at a rate of 5% per annum what would be its population in 2005?



38. In a Laboratory, the count of bacteria in a certain experiment was increasing at the rate of 2.5% per hour. Find the bacteria at the end of 2 hours if the count was initially 5,06,000.



39. A scooter was bought at Rs 42,000. Its value depreciated at the rate of 8% per annum, Find its value after one year.



40. In a primary school parents were asked about of the number of hours they spend per day in helping their children to do home work.



There were 90 parents who helped for $\frac{1}{2}$ hour to $1\frac{1}{2}$ hours. The distribution of parents according to the time for which, they said they helped is given in the adjoining figure, 20% helped for more than $1\frac{1}{2}$ hours per day, 30% helped for $\frac{1}{2}$ hour to 1 hours, 50% did not help at all. Using this, answer the following : How many said that they didnot help?

41. In a primary school parents asked about of the number of hours they spend per day in helping their children to do home work.



There were 90 parents who helped for $\frac{1}{2}$ hour to $1\frac{1}{2}$ hours. The distribution of parents according to the time for which, they said they helped is given in the adjoining figure, 20% helped for the than $1\frac{1}{2}$ hours per day, 30% helped for $\frac{1}{2}$ hour to 1 hours, 50% did not help at all. Using this, answer the following :

How many said that they helped more than $1\frac{1}{2}$ hours?

Watch Video Solution

42. A shop gives 20% discount. What would the sale price of each of those be?

A dress marked at Rs 120.

43. A shop gives 20% discount. What would the sale price of each of those be?A pair of shoes marked at Rs. 750.



44. A shop gives 20% discount. What would

the sale price of each of those be?

A bag marked at Rs. 250.

45. A table marked at Rs. 15,000 is availbale for Rs 14,400. Find the discount given and the discount percent.



46. An almirah is sold at Rs 5,225 after allowing

a discount of 5%. Find its marked price.

47. Find the selling price (SP) is a profit of 5% is made ona cycle of Rs. 700 with Rs. 50 as over head

charges

Watch Video Solution

48. Find the selling price (SP) is a profit of 5%

is made on

a lawn mover bought at Rs 1150 with Rs 50 as

transportation charge.



49. Find the selling price (SP) if a profit of 5%

is made on

a fan bought for Rs 560 and expenses of Rs 40

made on its repairs.

Watch Video Solution

50. A shopkeeper bought two TV sets ast Rs 10,000 each. He sold one at a profit 10% and

the other at a loss 10%. Find whether he made

an overall profit or loss.



51. Find the buying price of each of the following when 5% ST is added on the purchase of :

A towel at Rs 50

52. Find the buying price of each of the following when 5% ST is added on the purchase of :

Two bars of soap at Rs 35 each.

Watch Video Solution

53. Find the buying price of each of the following when 5% ST is added on the purchase of :

5 kg of flour at Rs 15 per kg.





54. If 8% VAT is included in the price, find the

original price of

A TV bought for Rs 13,500.

Watch Video Solution

55. If 8% VAT is included in the price, find the

original price of

A shampoo bottle bought of Rs 180

56. Two times a number is a 100% increase in the number. If we take half the number what would be the decrease in percent?

Watch Video Solution

57. By what percent is 2000 less than Rs. 2,400? Is it the same as the percent by which

Rs 2,400 is more than 2,000?

58. Find Simple Interest and amount to be paid on Rs. 15,000 at 5% per annum after two

years.

Watch Video Solution

59. Find the time period and rate for each: A sum taken for $1\frac{1}{2}$ years at 8% per annum is

compounded half yearly.

60. Find the time period and rate for each:

A sum is taken for 2 years at 4% per annum is

compounded half yearly.



61. A sum is taken for one year at 16% p.a. if interest is compounded after every three months, how many times interest will be charged in one year.

62. Find the amount to be paid:

At the end of 2 year on Rs 2400 at 5% per

annum compound annually.

Watch Video Solution

63. Find the amount to be paid:

At the end of 1 year on Rs. 1,800 at 8% annum

compounded quarterly.

64. A machinery worth Rs 10,500 depreciated

by 5%. Find its value after one year.



65. Find the population of a city after 2 years which is at present 12 lakh, if the rate of increase is 4%