

# DCA CLASSES

## CLASS VIII – MATHEMATICS – CHAPTER 08

### COMPARING QUANTITIES

Name:

Date:

- 01.** Find the ratio of speed of a cycle 15 km per hour to the speed of scooter 30 km per hour.  
(a). 1:2                      (b). 2:1                      (c). 1:3                      (d). 3:1
- 02.** The price of a scooter was Rs 34,000 last year. It has increased by 20% this year. What is the price now?  
(a). Rs 30,800              (b). Rs 40,800              (c). Rs 30,400              (d). Rs 40,400
- 03.** Rohan bought a second hand refrigerator for Rs 2,500, then spent Rs 500 on its repairs and sold it for Rs 3,300. Find his loss or gain per cent.  
(a). Loss 10 %              (b). Profit 15 %              (c). Profit 10%              (d). Loss 15 %
- 04.** Find the ratio of 5 m to 10 km.  
(a). 1:2000                      (b). 2000:1                      (c). 1:3                      (d). 3000:1
- 05.** An item marked at Rs 840 is sold for Rs 714. What is the discount %?  
(a). 10%                      (b). 15%                      (c). 20%                      (d). 25 %
- 06.** Find selling price (SP) if a profit of 5% is made on a cycle of Rs 700 with Rs 50 as overhead charges.  
(a). Rs 600                      (b). Rs 780                      (c). Rs 787.50                      (d). Rs 750
- 07.** Find the ratio of 50 paise to Rs 5.  
(a). 1:10                      (b). 10:1                      (c). 1:5                      (d). 5:1
- 08.** The list price of a frock is Rs 220. A discount of 20% is announced on sales. What is the amount of discount?  
(a). Rs 34                      (b). Rs 44                      (c). Rs 55                      (d). Rs 22
- 09.** Find selling price (SP) if a profit of 5% is made on a lawn mower bought at Rs 1150 with Rs 50 as transportation charges.  
(a). Rs 1200                      (b). Rs 1140                      (c). Rs 1260                      (d). Rs 1100
- 10.** Find the ratio of 5 km to 10 m.  
(a). 500:1                      (b). 1:500                      (c). 1:20                      (d). 20:1
- 11.** The list price of a frock is Rs 220. A discount of 20% is announced on sales. What is the sale price?  
(a). Rs 144                      (b). Rs 176                      (c). Rs 154                      (d). Rs 122

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- 12.** Find 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.  
(a). Rs 600                      (b). Rs 540                      (c). Rs 630                      (d). Rs 500
- 13.** Find the ratio of Rs 6 to 50 paise.  
(a). 12:1                          (b). 1:12                          (c). 1:30                          (d). 30:1
- 14.** A table marked at Rs 15,000 is available for Rs 14,400. Find the discount per cent.  
(a). 2 %                          (b). 4 %                          (c). 5 %                          (d). 8 %
- 15.** 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?  
(a). 26%                          (b). 30%                          (c). 28%                          (d). 20%
- Q01.** A picnic is being planned in a school for Class VII. Girls are 60% of the total number of students and are 18 in number. Find the ratio of the number of girls to the number of boys in the class.
- Q02.** A shopkeeper purchased 200 bulbs for Rs 10 each. However, 5 bulbs were fused and had to be thrown away. The remaining were sold at Rs 12 each. Find the gain or loss %.
- Q03.** 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?
- Q04.** The population of a city was 20,000 in the year 1997. It increased at the rate of 5% p.a. Find the population at the end of the year 2000.
- Q05.** Calculate the amount and compound interest on Rs 10,800 for 3 years at 12.5 % per annum compounded annually.
- Q06.** 72% of 25 students are good in mathematics. How many are not good in mathematics?
- Q07.** Sheela bought two fans for Rs 1200 each. She sold one at a loss of 5% and the other at a profit of 10%. Find the selling price of each. Also find out the total profit or loss.
- Q08.** Calculate the amount and compound interest on Rs 8,000 for 1 year at 9% per annum compounded half yearly.
- Q09.** 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?
- Q10.** 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.
- Q11.** 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?

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- Q12.** The price of a TV is Rs 13,000. The sales tax charged on it is at the rate of 12%. Find the amount that Vinod will have to pay if he buys it.
- Q13.** Find CI on Rs 12600 for 2 years at 10% per annum compounded annually.
- Q14.** A TV was bought at a price of Rs 21,000. After one year the value of the TV was depreciated by 5% (Depreciation means reduction of value due to use and age of the item). Find the value of the TV after one year.
- Q15.** Meenu bought two fans for Rs 1200 each. She sold one at a loss of 5% and the other at a profit of 10%. Find the selling price of each. Also find out the total profit or loss.
- Q16.** If Shilpa had Rs 600 left after spending 75% of her money, how much did she have in the beginning?
- Q17.** I purchased a hair-dryer for Rs 5,400 including 8% VAT. Find the price before VAT was added.
- Q18.** Find the time period and rate for a sum taken for 2 years at 4% per annum compounded half yearly.
- Q19.** Fabina borrows Rs 12,500 at 12% per annum for 3 years at simple interest and Radha borrows the same amount for the same time period at 10% per annum, compounded annually. Who pays more interest and by how much?
- Q20.** 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.
- Q21.** A shopkeeper bought two TV sets at Rs 10,000 each. He sold one at a profit 10% and the other at a loss of 10%. Find whether he made an overall profit or loss.
- Q22.** 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.
- Q23.** Vasudev invested Rs 60,000 at an interest rate of 12% per annum compounded half yearly. What amount would he get after 6 months?
- Q24.** A scooter was bought at Rs 42,000. Its value depreciated at the rate of 8% per annum. Find its value after one year.
- Q25.** Say for instance you buy a house for 250,000. Then, you make a down payment of 15% of the purchase price and take a 30-year mortgage for the balance.  
(a). What is your down payment?  
(b). What is your mortgage? If your monthly payment is 1200 dollars, what is the total interest charged over the life of the loan?
- Q26.** A House has a market value of 220,000. The assessed value of the house is 70%. If the tax rate is \$2 per \$100, how much is the property tax?