

WORK SHEET
SUBJECT- MATHS
Chapter-8 : Comparing Quantities

CLASS- VIII

1. Fill in the blanks:

- (i) 3 : 8 as a per cent is
- (ii) If a man loses ₹ 240 on selling an article for ₹ 1260, the loss per cent will be
- (iii) If S. P. = ₹ 900 and M. P. = ₹ 1200, then discount = %.
- (iv) The compound interest on ₹ 500 at 5% per annum for 1 year = ₹
- (v) If the interest is paid half yearly, then in the formula $A = P \left(1 + \frac{r}{100}\right)^n$, we take for n .

2. Answer *True* (T) or *False* (F) :

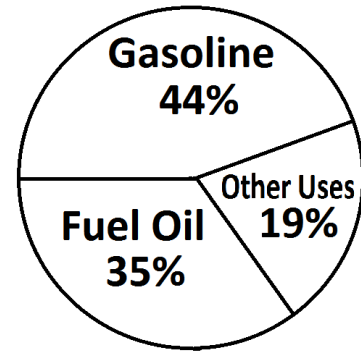
- (i) $a\%$ of b is equal to $b\%$ of a .
- (ii) If I am 20% taller than you, you are 20% shorter than me.
- (iii) If the profit is 20%, S. P. must be multiplied by $\frac{5}{6}$ to get C. P.
- (iv) When the interest is calculated yearly, the simple interest and compound interest are same for the first year.
- (v) Simple interest is calculated on the same principal for the entire loan period.

3. Choose the correct option (Multiple Choice Questions) :

- (i) If 9% of x is 27, the value of x will be
 (a) 24 (b) 30 (c) 300 (d) 330.
- (ii) If the selling price of an article is twice the cost price, the profit per cent is
 (a) 50% (b) 100% (c) 200% (d) cannot be calculated
- (iii) The simple interest on a sum of ₹ 2700, at a rate of $3\frac{1}{3}\%$ for 4 years is
 (a) ₹ 270 (b) ₹ 300 (c) ₹ 350 (d) ₹ 360.

- (iv) If a sum of money borrowed on simple interest for 10 years doubles itself, then the rate percent is
- (a) 2% (b) 5% (c) 10% (d) 12%.
- (v) Which of the following is more profitable for a one-year deposit?
- (a) a simple interest of 10%
- (b) a compound interest of 10% compounded annually
- (c) a compound interest of 10% compounded half-yearly
- (d) a simple interest of 11%.
4. A garden has 2000 trees. 12% of these are mango trees, 18% lemon and the rest are orange trees. Find the number of orange trees.
5. A certain school has 300 students, 142 of whom are boys. It has 30 teachers, 12 of whom are men. What percent of the total number of students and teachers in the school is female?
6. Ankita was given an increment of 10% on his salary. Her new salary is ₹ 3575. What was her salary before increment?
7. The population of a town increases by 10% annually. If the present population is 60000, what will be its population after 2 years?
8. Sunil loaned ₹ 8192 to Raveena to enable her to purchase a T. V. set. If Sunil charged interest at the rate of 12.5% per annum, compounded half-yearly, calculate the amount that Raveena will have to pay to Sunil after $1\frac{1}{2}$ years.
9. Ankit buys 50 chairs for ₹ 50, 000 but 20 of them are damaged. He decides to sell each damaged one at three fourths the price of the normal one. What should this price be in order that he may make a profit of 35% on the whole transaction?
10. A dealer of scientific instruments allows 20% discount on the marked price of the instruments and still makes a profit of 25%. If his gain over the sale of an instrument is ₹ 150, find the marked price of the instrument.
11. Pratyusha purchases a motorcycle, having marked price ₹ 46000 at a discount of 5%. If VAT is charged at the rate of 10%, find the amount Pratyusha has to pay to purchase the motorcycle.
12. A wholesale company marks goods without including sales tax. A particular item is marked as ₹ 760. If a customer is required to pay a sales tax of 15% on the item,
- (i) How much sales tax does she have to pay?
- (ii) How much will the item cost her when sales tax is included?

13. Petroleum is a very dark liquid when it is pumped out of the ground. Several useful products are made from this in a refinery. Two major products of petroleum are shown here. A particular refinery produces 8.4 lakh gallons of petroleum products per day. A gallon is nearly $4\frac{1}{2}$ litres.



- (i) How many of these gallons are used to make gasoline? How much is this in litres?
- (ii) Oil is measured by the barrel, each containing 42 gallons. How many barrels are used to make fuel oil?
14. A man bought two T. V. sets for ₹ 42500. He sold one at a loss of 10% and other at a profit of 10%. If the selling price of each T. V. set is same, determine the C. P. of each set.
15. Afridi purchased an old scooter for ₹ 16, 000. If the cost of scooter after 2 years depreciates to ₹ 14440, find the rate of depreciation.
16. Find the rate of interest for a sum that becomes $\frac{729}{625}$ times of itself in 2 years, when compounded annually.
17. The population of a place in the year 2000 was 48, 000. This showed a rate of increase of 5% per year. What would have been the population in the year 1998 and what will it be in the year 2003?
18. The boys and girls in a college are in the ratio 3 : 2. If 20% of the boys and 25% of the girls are adults, then what is the percentage of students who are not adults?
19. The simple interest on a certain sum of money for 3 years at 8% per annum is half of the compound interest on ₹ 4000 for 2 years at 10% per annum. What sum is placed on simple interest?
20. Suzy borrowed from Gurkeet certain sum for two years at simple interest. Suzy lent this sum to Hamida at the same rate for two years compound interest. At the end of two years, she received ₹ 110 as compound interest but paid ₹ 100 as simple interest. Find the sum and the rate of interest.