

NALANDA COLLEGE - COLOMBO 10

Grade 11

Mathematics

Second Term – Unit Test



9) Percentages

Part I

1. A person borrows Rs.8000 at an annual simple interest rate of 10%. How much interest will he pay after two years?
2. A man who borrowed Rs.30000, paid back Rs.40800 as the amount after 3 years and was released from the loan. Find the rate of interest charged for the loan.
3. A person who obtained a loan of Rs.70000 at 9% simple interest per year, paid Rs.12600 as interest for a certain period of time. Find the period of time of the loan.
4. An interest of Rs.42000 was paid for 3 years for a loan obtained at 14% simple interest per year. Find the loan obtained.
5. Find the price at which a trader will sell a TV set which he bought for Rs.40000 keeping a profit of 12%.
6. A trader gives 8% discount when selling an article, the marked price Rs.6000. What is the discount allowed?
7. A broker was paid Rs.40000 for selling a vehicle for Rs.1 000 000. What is the percentage commission he received?
8. If a vendor earns a profit of 20% by selling a refrigerator for Rs.72000, calculate its purchase price.
9. If a person takes a loan of Rs.10000 at a compound interest rate of 8% per year, calculate the total amount required to repay the entire loan in two years?
10. A TV set worth Rs.50000 is available for a down payment of Rs.10000 and 10 equal monthly installments of Rs.4220. Find the total amount paid in installments.

Part II



- 1) A furniture set priced at Rs. 120000 for outright purchase can be bought by making a down payment of Rs.40000 and paying the rest in 16 equal monthly installments. If 12% annual interest rate is charged on the loan, where the interest is calculated on the reducing loan balance, find the amount of a monthly installments.
- 2) a) If a person takes a loan of Rs.20000 at a compound interest rate of 8% per year, calculate the total amount required to repay the entire loan in 3 years.

b) Sunil deposits Rs.50000 in an account paying 10% annual interest compounded yearly. After one year the bank interest rate increases to 12%. How much money will sunil receive in total as interest at the end of 3 years?
- 3) A down payment of Rs.5000 and 14 monthly installments of Rs.1650 each should be paid to purchase a colour television set under reducing balance which can be bought on outright purchase at Rs.26000. Find the rate of interest per annum.