O Level Maths

Topic: Simple and Compound Interest

Instructions

Answer all questions. Show working where necessary. Use your knowledge of simple interest and compound interest to solve the problems.

Practice Problems

1. Calculate the simple interest on \$800 for 3 years at an interest rate of 5% per annum.
2. A sum of money is invested at 4% per annum simple interest. If the interest earned after 2 years is \$240, find the principal amount.
3. Calculate the compound interest on \$1200 for 2 years at an interest rate of 6% per annum, compounded annually.
4. A sum of \$1500 is invested at an interest rate of 8% per annum, compounded annually. What is the total amount after 3 years?
5. Find the simple interest earned on \$5000 for 4 years at an interest rate of 7% per annum.
6. Calculate the compound interest on \$1000 for 3 years at 5% per annum, compounded quarterly.
7. If the principal is \$2500 and the interest rate is 10%, calculate the simple interest for 6 months.
8. A sum of \$8000 is invested at an interest rate of 9% per annum, compounded annually. Find the amount after 4 years.

Word Problems

1. A person invests $5000 at 6% per annum simple interest. How much interest will he receive after 3 years? What will be the total amount at the end of 3 years?
2. A bank offers an interest rate of 5% per annum, compounded annually. If you invest $2000, how much interest will you earn after 2 years?
3. A loan of $3000 is taken at an interest rate of 12% per annum, compounded quarterly. What will be the amount to be paid back after 1 year?

Multiple-Choice Questions

1. What is the simple interest on $2000 at 8% per annum for 5 years?
   A. $800
   B. $1000
   C. $900
   D. $1200
2. If $4000 is invested at 10% per annum compound interest, what will be the amount after 2 years, compounded annually?
   A. $4400
   B. $4600
   C. $4840
   D. $5000
3. A principal of $3000 is invested at 5% simple interest. What will be the total amount after 3 years?
   A. $3450
   B. $3500
   C. $3000
   D. $3100
4. What is the compound interest on $1200 for 3 years at 6% per annum, compounded annually?
   A. $200
   B. $224
   C. $180
   D. $240