

1. Find the simple interest and Accumulated balance for the following;
 - Principal=10000 naira; APR= 8%; Time= 4 months
 - Principal=20000 naira; APR= 6%; Time= 3 months
 - Principal=60000 naira; APR= 4%; Time= 2 years
 - Principal=50000 naira; APR= 7%; Time= 2 years
2. A principal of 20,000 naira earns 6% per year simple interest. How long will it take for the accumulated balance to become 23000 naira?
3. An account with 10000 naira earns interest at annual rate of 8%. Find the amount in this account after 10 years if the compounding is (a)monthly (b)daily (c)Quarterly (d)weekly
4. how much money should be deposited in a bank account earning an annual interest rate of 8% compounded quarterly, in order to have 10 million naira at the end of 10 years?
5. Every six months, Segun puts 10000 naira into an account earning an APR of 10% compounded bi-annually. How much will be in the account at the end of 15 years?
6. Kunle wants to start a small business in 5 years. He will need 20 million naira to start the business. How much should he deposit every month into an account with an APR of 9% compounded monthly in order to meet his goal?
7. Imagine you want to retire in 30 years with a pension of 1,000,000 naira from an investment plan.
 - How much money would you have to invest today at an APR of 9%, compounded daily, in order to have 1,000,000 naira in 30 years?
 - calculate the total return on investment after 30 years and comment on what will happen to the original investment after 30 years.
 - calculate the Annual Percentage Yield (APY) on the investment over the 30 year period and comment on what will happen to the original investment every year.
 - How much will the N1,000,000 generate in interest each year, if it is invested at an APR of 9%, compounded daily?
8. You want to buy a motorcycle costing 2 million naira. You have two options;**option one-** You can borrow 2 million naira at an APR of 8% for 1 year and pay it back in monthly payments over the year,**option two-** You can save the money you would have made in loan payment during 1 year and purchase the motorcycle. if you decide to save your money for 1 year,

- You will have to deposit the equivalent of 1 month's loan payment in your savings account at the end of each month, and you will earn 5% interest on the account, compounded monthly
- You will pay 28% of the interest earned on the savings account in taxes.
- An annual inflation rate of 7% will have increased the price of the motorcycle by 7%

if you choose the option of saving your money for 1 year, how much money will you have left after you pay the tax and purchase the motorcycle?