

Compound Interest

December 2, 2009

1 Simple Interest

Simple interest is interest earned when the interest rate is **only** on the principal.

Suppose you deposit \$1000 in a savings account earning 5 % simple interest per year. Fill in the following table:

End of Year:	Account Balance
1	
2	
3	
4	
5	

Can you figure out a formula for the account balance as a function of time?

2 Compound Interest

Compound interest is interest earned when the interest rate is applied to the account balance **including previous interest earned**.

Suppose you deposit \$1000 in a savings account earning 5 % interest compounded per year. Fill in the following table:

End of Year:	Account Balance
1	
2	
3	
4	
5	

Can you figure out a formula for the account balance as a function of time?