

Definitions:

Compound Interest:

Periodic Interest Rate:

Annual Percentage Yield (APY):

Inflation:

Examples:

Finding Future value: Lets say you have deposited \$50,000 into an account with 3.5% interest compounded quarterly. What is the future value after 6 years?

Comparing periods: In the last example, what is the future value after 6 years if interest is compound daily?

Finding the interest rate: ¹⁸⁷⁾ A woman who is now 28 years old invests \$30,000 in a retirement account. What interest rate, compounded monthly, would she have to earn in order for the account to be worth \$500,000 when she retires at age 65?

Finding Time: Suppose you deposit \$960 into an account with 13% interest compounded annually. How long does it take for the account to be worth \$1400?

APY: Find the annual percentage yield for an account earning 8.5% interest compounded bimonthly.

Inflation: Based on the Consumer Price Index, the rate of inflation in the US during the high inflation years of President Jimmy Carter's term, beginning in January 1977 and ending in January 1981, was about 10.7% per year. What salary in 1977 would be equivalent to a \$20,000 salary in 1981?