The Real Price of Borrowing

APR, simple vs. compound interest, amortization, and how inflation eats returns.

Name: _____ Date: _____

OBJECTIVE

Compare interest rates across lenders, calculate simple and compound interest, read an amortization schedule, and find real return after inflation.

1. Shop for the lowest APR

Annual Percentage Rate (APR) is the true yearly cost of borrowing, fees included. Rank these $1,000, one-year loan offers from cheapest (1) to most expensive (4).

Rank	Lender	APR
___	Credit union personal loan	11%
___	Bank credit card	22%
___	Title pawn loan	120%
___	Payday loan	391%

DISCUSS

Is a 391% APR payday loan ever the right call for someone facing a real emergency with no other options? Argue both sides with a partner before you finish ranking the loans above.

2. Simple vs. compound interest

Simple interest: I = P × r × t. Compound interest grows on the growing balance, not just the original amount.

$500 at 5% simple interest for 3 years: interest = _____ total = _____

$500 at 5% interest, compounded annually for 3 years: year 1 = _____ year 2 = _____ year 3 = _____

3. Read an amortization schedule

Sample $200,000 mortgage at a fixed rate. Study the pattern, then answer.

Payment #	Interest portion	Principal portion
1	$833	$317
60 (year 5)	$746	$404
300 (year 25)	$104	$1,046

The Real Price of Borrowing

APR, simple vs. compound interest, amortization, and how inflation eats returns.

What happens to the interest-vs-principal split as the loan matures?

_____

TRY IT YOURSELF
Search for a free online amortization calculator, enter a loan amount, rate, and term, and confirm the same pattern shows up on a loan you choose (SSEPF4c).

4. Real return after inflation

Real return = nominal return − inflation rate.

Scenario	Nominal return	Inflation	Real return
Savings account	1.5%	3.2%	
CD	4.0%	3.2%	
Stock index fund	9.0%	3.2%	