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Simple Interest Calculator

Compound Interest means that you earn "interest on your interest", while Simple Interest means that you don't - your interest payments stay constant, at a fixed percentage of the original principal. First, a calculator to let you see the difference.

Inputs

Starting Principal:	$ 800,000.00
Years:	13
Annual Interest Rate:	5 %

Calculate

Results

Future Value, using...	
Simple Interest:	$ 1,320,000.00
Annually Compounded Interest:	$ 1,508,519.31

The lesson is that compound interest is a better investment, which seems both obvious and moot - after all, bank accounts always pay compound interest anyway. Even a bond investment is really compound interest if you think about it: you get fixed coupons (that's simple interest) but you can invest them to get interest on them (ergo *compound* interest).

The situation where simple interest occurs naturally is when the principal doesn't change over time. This is true with an interest-only mortgage, for example, where your monthly payments only pay the interest on your loan, but don't pay down the loan itself.

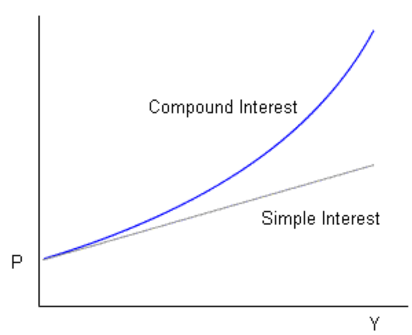
Simple Interest Formula

Lets say that P is your starting principal (spelled -pal and not -ple, because Your Money is Your Pal), r is the interest rate (expressed as a decimal), and Y is the number of years you invest. Then your future value will be:

$P\,(1 + rY)$ (Simple Interest)

$P\,(1 + r)^Y$ (Annually Compounded Interest)

Note the two formulas give the same answer for one year. After that, compound interest takes off.



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