

Invest and Build Wealth Worksheet

Using the charts below calculate 1) interest or return earned, and 2) total value.

How to Calculate Simple Interest:

$$A = P(1 + rt)$$

A= Amount

P= Principal

r= Interest rate (decimal)

t= Time (years)

Simple Interest/Rate of Return Example:

Imagine you have \$100 and plan to put it in the bank for 6 years with a 6% interest rate, calculated as .06%. Here's what the calculation would look like:

$$100(1+.06 \times 6) = \$136$$

The interest is \$36. If you invested \$100, you would have \$136 after 6 years.

How to Calculate Compound Interest:

$$A = P(1 + r/n)^{nt}$$

A= Amount

P= Principal

r= Interest rate (decimal)

n= Number of times interest is compounded per year

t= Time (years)

Compound Interest/Rate of Return Example:

Imagine the same scenario (\$100, interest rate calculated as .06% for 6 years), but this time interest will be compounded annually. Here's how your money grows:

$$A = 100(1 + .06/6)^{1 \times 6}$$

$$A = 100(1.06)^6$$

$$A = 100 \times 1.4185$$

$$A = \$141.85$$

Strategy	Principal	Interest Rate	Time	Interest or Return Type	Interest or Return Earned	Total Value
Stock	\$10,000	3 %	10 years	Compound		
Mutual Fund (portfolio of stocks & bonds)	\$1,000	7 %	20 years	Compound		
Bond	\$100	5 %	30 years	Simple		

Answers:

Stock	\$10,000	3 %	10 years	Compound	\$3,439	\$13,439
Mutual Fund (portfolio of stocks & bonds)	\$1,000	7 %	20 years	Compound	\$2,869	\$3,869
Bond	\$100	5 %	30 years	Simple	\$150	\$250

