

Name: _____

Date: _____

SIMPLE INTEREST VS COMPOUND INTEREST

$I = P \times R \times T$ I = the total interest P = the principal (the amount borrowed) R = the interest rate (as a decimal) T = the time in years	$A = P (1 + i)^n$ A = the total amount to be repaid (principal + interest) P = the principal i = the interest rate (as a decimal) n = the number of periods
EXAMPLE	
If you put \$10,000 into a saving account at 5% for 5 years, what will the interest amount be for both?	
TRY THIS...	
If you invested \$5,000 at 8% for 30 years, what will the interest amount be for both?	

Note:

www.getsmarteraboutmoney.com has an online interactive compound interest calculator.

Simple and Compound Interest Questions:

1. How much interest would you earn on an **\$8,000.00 deposit with an annual interest rate of 5 percent with simple interest over six years?** The first calculation has been done for you.

	Beginning of the Year	During the Year	End of the Year
Year 1	\$8,000	+(5% of \$8,000=\$400)	\$8,400
Year 2	\$8,400.00		
Year 3			
Year 4			
Year 5			
Year 6			

2. If the same \$8000.00 is **compounded annually for six years at 5% interest**, how much would you earn?

	Beginning of the Year	During the Year	End of the Year
Year 1	\$8,000	+(5% of \$8,000=\$400)	\$8,400
Year 2	\$8,400.00		
Year 3			
Year 4			
Year 5			
Year 6			

3. For each year, calculate the difference between simple and compound interest.

Year 1	
Year 2	
Year 3	
Year 4	
Year 5	
Year 6	