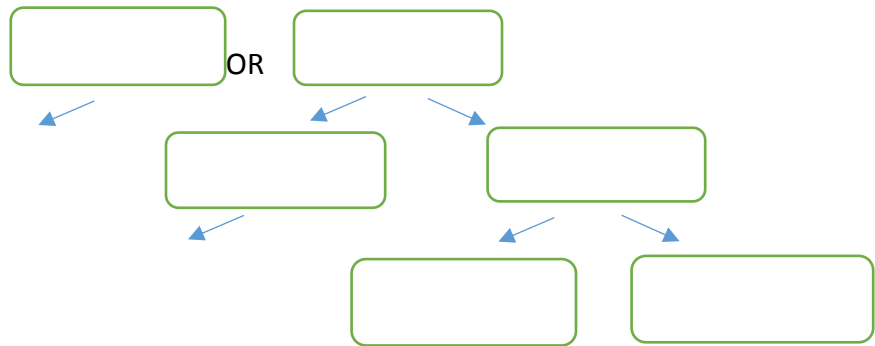


Day 1 Finance Student Notes: Financial Examples

A = r = k = I =
 P = t = R = n =

Interest Compounded k times per year	Interest Compounded Continuously
Future Value	Present Value

When to use which formula?



1) Suppose Lucy Cash invests \$1000 at 6% interest compounded **annually**. What is the value of Lucy's investment after 8 years?

2) Richie Rich has \$700 to invest at 2% annual interest compounded monthly. How long will it take for his investment to grow to \$4000? How much interest did he earn?

3) Suppose Anita Lone invests \$200 in her savings account at 0.9% annual interest compounded **continuously**. Find the value of her investment at the end of 6 years.

4) a. Buck is saving money for his spring break trip and the banks are offering great rates on their saving accounts. At the end of each quarter (report card time), Buck makes deposits of \$200 into an account that pays 3% interest compounded quarterly. How much will Buck have in his account at the end of the year?

b. How much money did he contribute? How much interest did he earn?

c. Another bank is offering a rate of 4.5% interest compounded quarterly. How much will Buck have after 1 year?

5) a. Mercedes purchases a car for \$18,500. What are the monthly payments for a 4-year loan with a \$2000 down payment if the annual interest (APR) is 2.9%?

b. What if the interest rate was 5.9%? How much more are you paying in interest?

6) a. Haley Homes wants to buy a townhouse. She has nothing to put towards her down payment and the townhouse she likes is \$140,000. If Corporate Mortgage Financial is offering her a loan with a 4.6% interest rate compounded monthly for 30 years, what is her monthly payment?

b. After 30 years, how much does she actually end up paying for the townhouse?

c. How much does she pay in interest?