Formula Sheet

**Compound Interest Formula** 

A = Amount of money in your account

P = Principle or the amount you started with

 = Number of times interest is compounded annually

Daily: 365

Monthly: 12

Weekly: 52

Quarterly: 4

= Total number of times interest is compounded 

r = Annual Percentage Rate ***Converted from a percent to a decimal*** (APR)

Example 1: A bank offers an APR of 1.5% on a savings account compounded quarterly. If I deposit $1000 dollars into the account, how much will there be in 1 year?



A=1015.08

P=1000

=4

=1x4 =4

R=1.5/100 = .015

**Depreciation Formula**

V = P(1-r) n  
  
where   
  
V = Future Value (after depreciation)  
P = Present Value  
r = Depreciation Rate in decimal form (divide percent by 100)  
n = Number of Years Depreciated

**Example #1**

**I want to buy a new car, which will cost $15,000. If the car depreciates at an average rate of 12% per year, how much will it be worth in 5 years?**

P = 15000

r = .12 equals (12%/100) **15000(1-.12)^5**

n = 5 **7915.978752**

**V = 7915.98**