**COLLEGE ALGEBRA PROJECT**

**HARD TIME, HARD LOANS**

**FORMULA SHEET**

$A=P\left(1+\frac{r}{n}\right)^{nt}$ **A = Accumulated Value**

 **P = Principal (or initial amount)**

 **r = annual interest rate expressed as a decimal**

 **n = the number of times the loan/account is compounded per year**

 **t = the amount of time in years**

$A=Pe^{rt}$ **A = Accumulated Value**

 **P = Principal (or initial amount)**

 **r = annual interest rate expressed as a decimal**

 **t = the amount of time in years**

***NOTE: In College Algebra, we use r for the annual interest rate and t for the time in years. In personal finance classes, it is more common to see APR stand for the annual interest rate and Y for the time in years.***