



*FRM*      **Math 1030 #10b**      *ARM*

**Loans, Credit Cards and Mortgages**

**Credit Cards**

*Installment Loan*

*Payday Loan*

## Credit Cards

EX 1: You have \$4000 of credit card debt that you would like to pay off in the next 3 years. You will not make any additional charges on your card during that time. The APR on your card is 21%.

a) What will your monthly payments be?

$$PMT = \frac{P \cdot \left( \frac{APR}{n} \right)}{\left[ 1 - \left( 1 + \frac{APR}{n} \right)^{-nY} \right]}$$

b) How much will you pay during those 3 years?

c) What is the overall percentage you paid in interest?

EX 2: If you put \$3000 on a credit card with 21% interest rate at age 20 and just make minimum payments of \$60 each month, how much will you still owe at age 25?

$$PMT = \frac{P \cdot \left( \frac{APR}{n} \right)}{\left[ 1 - \left( 1 + \frac{APR}{n} \right)^{(-nY)} \right]}$$