Math 1030 #10c

FRM

ARM

Loans, Credit Cards and Mortgages

Mortgages

Installment Loan

Payday Loan

Mortgages

A mortgage is an installment loan to finance a home.

The down payment is the amount of money you must pay up front to be given the loan.

Closing costs are fees you must pay to be given the loan.

direct costs

fees charged as points, 1% of the loan amount.

One type is a fixed rate mortgage (FRM) where you have a guaranteed interest rate for the life of the loan.

EX 1: Compare the monthly payments and total loan cost for these two loans. You borrow $150,000 for a home.

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

30-year with APR of 7.25%

15-year with APR of 6.8%

EX 2: Consider these options for a $180,000 mortgage. Calculate the monthly payments and total closing cost for each.

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

30-year FRM 7.5%	30-year FRM 6%
with $1200 direct cost	with $1500 direct costs
and no points	and 4 points

An <u>Adjustable Rage Mortgage</u> (ARM) is one in which the interest rate changes whenever prevailing rates change.

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

EX 3: Compare these two options for a $125,000 30-year loan.
Summarize the payments for the first two years.

FRM at 8.5%	ARM with first year 5.5% and second year at 10%