**Loan Amortization Name \_\_\_\_\_\_\_\_\_\_\_\_\_**

**Using the TI-84 to find the loan balance at the end of 12 months**

**Example**

Loan Amount = $175,000

Length = 30 years

Interest Rate = 4.25%

1. Set up the loan using the APPS function as normal (fill in N, I% and PV and calculate PMT)
2. Press the Y= button (cursor should be beside \Y1=)
3. Press APPS, 1Finance, 9bal
4. After parenthesis type X) so line looks like \Y1=bal(X)
5. Press 2nd then WINDOW
6. Set TblStart = 1 and ΔTbl to 1
7. Press 2nd the GRAPH
8. A table with the balance after each month is displayed

**Assignment**

**Initial Loan:**

Loan Amount: $300,000

Interest Rate: 5.75%

Length: 15 Years

Monthly Payment: $2,491.23

Balance After 12 Months: \_\_\_\_\_\_\_\_\_\_\_\_\_

**Change Loan From 15 to 30 Years:**

Loan Amount: $300,000

Interest Rate: 5.75%

Length: 30 Years

Monthly Payment: \_\_\_\_\_\_\_\_\_\_\_\_

Balance After 12 Months: \_\_\_\_\_\_\_\_\_\_\_\_\_

What happened to the Payment when we increased the length of the loan?

What happened to the Balance After 12 Months when we increased the length of the loan?

**Lower Interest Rate:**

Loan Amount: $300,000

Interest Rate: 5.25%

Length: 30 Years

Monthly Payment: \_\_\_\_\_\_\_\_\_\_\_\_

Balance After 12 Months: \_\_\_\_\_\_\_\_\_\_\_\_\_

What happened to the Payment when we lowered the interest rate?

What happened to the Balance After 12 Months when we lowered the interest rate?

**Pay extra amount each month:**

Loan Amount: $300,000

Interest Rate: 5.25%

Length: 30 Years

Monthly Payment: \_\_\_\_\_\_\_\_\_\_\_\_ + $100 =

What do you think will happen to the balance after 12 months when we pay an extra $100 each month?

What do you think would be the long-term effect on the mortgage by paying an extra $100 each month?