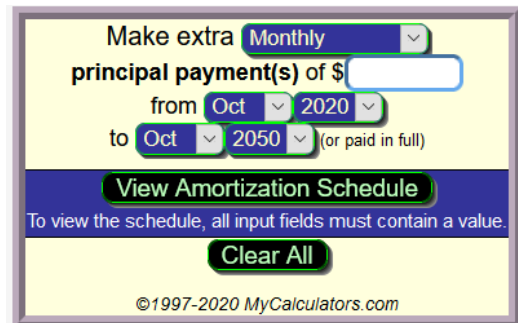
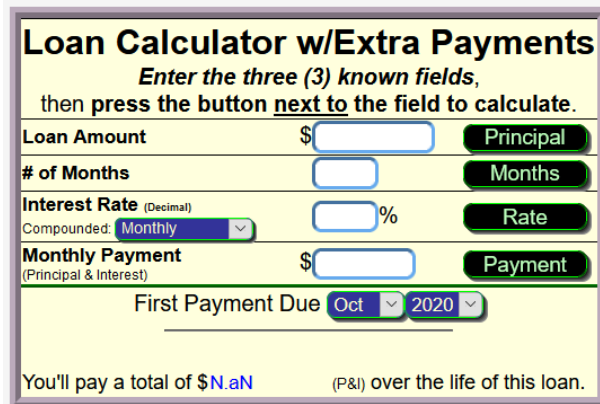


**(15 Points Possible)**

In this particular project, you will need to print out two realty listings on Realtor.com (or some other similar website). Choose one house that would be your dream house and choose a more affordable, realistic purchase such as a/an condo/apartment/studio or even a small family home. I would recommend a house in an area where you would like to settle in as well. Remember, you want to be somewhat realistic in what you would like to purchase.

Next, you will need to go to the link <https://www.mycalculators.com/ca/loancxpsm.html>. This link can also be found in Module #3. This link is essentially a loan calculator that will also produce an amortization schedule. Here is what the two form fields will look like:



Here is how the loan calculator works:

**1) Loan Amount:**

Simply type in the loan amount. Here, we will assume that you do not have a down payment, and the amount will simply be the amount that is on each flyer.

**2) # of Months:**

Enter in amount of months, not years, for your loan. Most mortgage companies have 120, 180, 240, and 360-month loans (or 10, 15, 20, and 30-year loans).

**3) Interest Rate:**

Enter in the annual interest rate. You will need to enter the rate as a percent. Do not change from a percent to a decimal here. Since we are obtaining monthly payments, make sure it stays on as compounded monthly as shown above. Here we will also assume that you have a fixed rate over the lifetime of the loan. Never get a variable rate!

**4) Monthly Payment:**

Once the above three values are entered in the cells, click the payment button, and it will calculate the monthly payment.

**5) Making Extra Principal Payments:**

Mortgage lenders will let you have the opportunity to make additional monthly payments on top of the required monthly payment. Those additional payments will be directly applied towards the principal in which consequently, will trim down the length of the loan as well as paying less in interest. Enter in the time period, usually monthly, along with the amount of the additional payment along with the start and end dates

**6) View Amortization Schedule:**

Click this button after applying all entries above. This will give you the amortization schedule.

The exercises and directions are below:

**HOME #1 – (Affordable)**

For your first house, go to realtor.com and find a house you desire that would be affordable for you in the near future. Use the selling price as the loan amount. Assume, that you have paid all taxes and escrow fees upfront already. Also, find your rate from the table below. The first letter of your last name corresponds to the interest rates that you will receive for each term loan.

- #A) Calculate the loan summary for Home #1, under a 30-year fixed mortgage. At the bottom of the last page, you will see a button to print or save as a PDF file. **Print out all pages or save as a PDF.**
  
- #B) Calculate the loan summary for Home #1, under a 30-year fixed mortgage, but this time include an extra optional payment of \$100 in addition to the regular monthly payment. **Print out the first and last pages or save as a PDF.**

**HOME #2 – (Dream)**

For your second house, go to realtor.com and find your dream house. Again, use the selling price as the loan amount. Just like in the previous home, assume, that you have paid all taxes and escrow fees upfront already. Also, find your rate from the table on the next page. The first letter of your last name, corresponds to the interest rates that you will receive for each term loan.

- #C) Calculate the loan summary for Home #2, under a 30-year fixed mortgage. **Print out the first and last pages or save as a PDF.**
  
- #D) Calculate the loan summary for Home #2, under a 30-year fixed mortgage, but this time you just found out that your bank/mortgage lender will give you the absolute best rate they have to offer. That rate is **2.375%**. **Print out the first and last pages or save as a PDF.**

Last Name	TopCat’s Special Interest Rates	Last Name	TopCat’s Special Interest Rates	Last Name	TopCat’s Special Interest Rates
A	3.65% for a 30-year loan	J	3.23% for a 30-year loan	S	3.4% for a 30-year loan
B	3.7% for a 30-year loan	K	3.45% for a 30-year loan	T	3.35% for a 30-year loan
C	3.84% for a 30-year loan	L	3.5% for a 30-year loan	U	3.25% for a 30-year loan
D	3.55% for a 30-year loan	M	3.28% for 30-year loan	V	3.58% for a 30-year loan
E	3.75% for a 30-year loan	N	3.52% for a 30-year loan	W	3.95% for a 30-year loan
F	3.44% for a 30-year loan	O	3.375% for a 30-year loan	X	<b>3.25% for a 30-year loan</b>
G	3.65% for a 30-year loan	P	3.58% for a 30-year loan	Y	3.38% for a 30-year loan
H	3.39% for a 30-year loan	Q	3.3% for a 30-year loan	Z	3.15% for a 30-year loan
I	3.6% for a 30-year loan	R	3.24% for a 30-year loan		

*(The follow up questions on the next page is the actual first page of the project. The rest of the pages should be the calculations of the four loan summaries from above. The very last pages are to be the listings for both homes. Please label each and every page.)*

- First Page: Follow up questions and calculations (This can be found on the next page)
- Next set of pages from Loan Summary #A
- Next set of pages from Loan Summary #B
- Next set of pages from Loan Summary #C
- Next set of pages from Loan Summary #D
- Listing for Home #1 – Affordable House
- Listing for Home #2 – Dream House

(15 Points Possible)

Name: \_\_\_\_\_

Follow up questions and calculations.

- 1) Suppose you were to start your calculations as of 5/01/20. Using loan summary #A only, at what payment number and date will your principal exceed the interest when making your regularly scheduled monthly payment? Please also highlight the date and payment number on loan summary #A at which this takes place.

Payment Number: \_\_\_\_\_

Date: \_\_\_\_\_

- 2) How much money overall did you save using loan summary #B instead of loan summary #A, when paying an additional \$100 per month in loan summary #B?

Scheduled Number of Payments to be made: \_\_\_\_\_

Total Number of Payments that include a \$100.00 optional payment: \_\_\_\_\_

Total in Optional Payments: \_\_\_\_\_

Total Interest in Loan #A: \_\_\_\_\_

Total Interest in Loan #B: \_\_\_\_\_

Total Savings: \_\_\_\_\_ - \_\_\_\_\_ = \_\_\_\_\_  
Total Interest in Loan #A      Total Interest in Loan #B      Total Savings

- 3) How much money in interest did you save when your interest rate changed by .5% or ½ % from loan summary #C to loan summary #D?

Total Interest in Loan #C: \_\_\_\_\_

Total Interest in Loan #D: \_\_\_\_\_

Total Savings: \_\_\_\_\_ - \_\_\_\_\_ = \_\_\_\_\_  
Total Interest in Loan #A      Total Interest in Loan #B      Total Savings

- 4) Calculate the monthly payment in Loan Summary #A by hand (not using Excel, show your work) using the

formula for amortization:  $R = \frac{P\left(\frac{r}{n}\right)}{1 - \left(1 + \frac{r}{n}\right)^{-nt}}$ . (Remember,  $n = 12$ , since monthly payments are being made.)