

Math 1050 Mortgage Project

Name Tray Anderson

Due date: 12-3-15 20

In this project we will examine a home loan or mortgage. Assume that you have found a home for sale and have agreed to a purchase price of \$201,000.

**Down Payment:** You are going to make a 10% down payment on the house. Determine the amount of your down payment and the balance to finance.

Down Payment 20,100

Mortgage Amount 180,900

Part I: 30 year Mortgage

**Monthly Payment:** Calculate the monthly payment for a 30 year loan (rounding up to the nearest cent) by using the following formula. **Show your work.** [PMT is the monthly loan payment,  $P$  is the mortgage amount,  $r$  is the annual percent rate for the loan *in decimal*, and  $Y$  is the number of years to pay off the loan.] For the 30 year loan use an annual interest rate of 4.975%.

$$PMT = \frac{P \left( \frac{r}{12} \right)}{1 - \left( 1 + \frac{r}{12} \right)^{-12Y}}$$

Show work here

.004145833'

$$= \frac{180900 \left( \frac{.04975}{12} \right)}{1 - \left( 1 + \frac{.04975}{12} \right)^{-12(30)}} = \frac{749,981.897}{1 - (.225504633)}$$

$$= \frac{749,981.897}{.774495367} = 968,348.2716$$

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Monthly Payment for a 30 year mortgage 968.3481937

Note that this monthly payment covers only the interest and the principal on the loan. It **does not cover** any insurance or taxes on the property.

**Amortization Schedule:** In order to summarize all the information regarding the amortization of a loan, construct a schedule that keeps track of the payment number, the principal paid, the interest, and the unpaid balance. A spreadsheet program is an excellent tool to develop an



amortization schedule. We can use a free amortization spreadsheet on the web. The web address is: <http://www.bretwhissel.net/amortization/amortize.html>. Enter the **amount of the loan**, i.e. the selling price minus the down payment, the **interest rate**, and the appropriate **number of years**. Check the box to show the schedule.

Amortization Schedule monthly payment for a 30 year mortgage 968.35  
(Note: if this is more than 2 or 3 cents different from your calculation, check your numbers!)

Total interest paid over 30 years 167,705

Total amount paid 348,605

Notice that the amount of the payment that goes towards the principal and the amount that goes towards the interest are not constant. What do you observe about each of these values?

most earlier payments go to interest, as the loan ages, the payments start to go toward principle.

Number of first payment when more of payment goes toward principal than interest JAN 2032  
16 years

As already mentioned, these payments are for principal and interest only. You will also have monthly payments for home insurance and property taxes. In addition, it is helpful to have money left over for those little luxuries like electricity, running water, and food. As a wise home owner, you decide that your monthly principal and interest payment should not exceed 35% of your monthly take-home pay. What minimum monthly take-home pay should you have in order to meet this goal? Show your work for making this calculation.

Show work here 968.35

$$x \cdot .35 = 968.35$$
$$x = \frac{968.35}{.35}$$
$$x = \$2766.714$$

← minimum take home pay

Minimum monthly take home pay = \$ 2766.714.

It is also important to note that your net or take-home pay (after taxes) is less than your gross pay (before taxes). Assuming that your net pay is 73% of your gross pay, what minimum gross annual salary will you need to make to have the monthly net salary stated above? Show your work for making this calculation.

Show work here.  $2766.714(.73) = 2019.701$

$$2766.714 = x(.73) \quad x = \frac{2766.714}{.73}$$

Minimum gross annual salary = 3790.02

### Part II: Selling the House

Let's suppose that after living in the house for 10 years, you want to sell. The economy experiences ups and downs, but in general the value of real estate increases over time. To calculate the value of an investment such as real estate, we use continuously compounded interest.

Find the value of the home 10 years after purchase assuming a continuous interest rate of 4%. Use the full purchase price as the principal. Show your work.

Show work here.  $A = Pe^{rt}$

$$A = 180900e^{(.04)(10)}$$

$$A = 180900e^{(.4)}$$

$$A = 269871.0878$$

Value of home 10 years after purchase 269,871.09

Assuming that you can sell the house for this amount, use the following information to calculate your gains or losses:

Selling price of your house 269,871.09

Original down payment 20,100

Mortgage paid over the ten years 120(968.35)

The principal balance on your loan after ten years 116,202

Do you gain or lose money over the 10 years? How much? Show your amounts and summarize your results:

269,871.09  
201,000  
 68,871.09

I LOSE :-

paid 116,202

gain 68,871.09 from sale

Loss: 47,330.91

**Part III: 15 year Mortgage**

Using the same purchase price and down payment, we will investigate a 15 year mortgage.

**Monthly Payment:** Calculate the monthly payment for a 15 year loan (rounding up to the nearest cent) by using the following formula. Show your work! [PMT is the monthly loan payment,  $P$  is the mortgage amount,  $r$  is the annual percent rate for the loan *in decimal*, and  $Y$  is the number of years to pay off the loan.] For the 15 year loan use an annual interest rate of 4.735%.

$$PMT = \frac{P \left( \frac{r}{12} \right)}{1 - \left( 1 + \frac{r}{12} \right)^{-12Y}}$$

Show work here.

$$180900 \left( \frac{.04735}{12} \right) = 180900 (.003945833) =$$

$$\frac{713.80125}{1 - \left( 1 + \frac{.04735}{12} \right)^{-12(15)}} = \frac{713.80125}{2.051658291}$$

↑

$$\left( 1.003945833 \right)^{-180} = .492208727$$

$$1 - .492208727 = .507791273$$

$$\frac{713.80125}{.507791273} = 1405.698144$$

Monthly Payment for a 15 year mortgage = 1,405.70

Use the amortization spreadsheet on the web again, this time entering the interest rate and number of payments for a 15 year loan.

Amortization Schedule monthly payment for a 15 year mortgage 1405.70  
 (Note: if this is more than 2 or 3 cents different from your calculation, check your numbers!)

Total interest paid over 15 years 72,125.67

Total amount paid 253,025.67

Number of first payment when more of payment goes toward principal than interest 5<sup>th</sup> payment

Suppose you paid an additional \$100 towards the principal each month. How long would it take to pay off the loan with this additional payment and how will this affect the total amount of interest paid on the loan? [If you are making extra payments towards the principal, include it in the monthly payment and leave the number of payments box blank.]

Length of time to pay off loan with additional payments of \$100 per month 13 years

Total interest paid over the life of the loan with additional \$100 monthly payments 64,787.50

Total amount paid with additional \$100 monthly payments 156(100.00) = 15,600

Compare this total amount paid to the total amount paid without extra monthly payments. How much more or less would you spend if you made the extra principal payments?

without extra payment	- with	=	<u>7338.17</u> saved in interest	
72,125.67	64,787.50			
				+ 1405.70 x 2 years = 33,736.8
				+ 7338.17
				<b>Total saving: 41,074.97!</b>

**Part III: Reflection**

Did this project change the way you think about buying a home? Write one paragraph stating what ideas changed and why. If this project did not change the way you think, write how this project gave further evidence to support your existing opinion about buying a home. Be specific.

Being a homeowner, I am surprised to see how much goes towards \$ interest early in the loan. I also see why "staying put" in a home is the better way, rather than moving every 6-10 years. What I have learned: Go 15 years and throw as much as possible extra towards the interest. Also, to win the lottery, fund my own home without interest, and buy one on each continent!

# U.S. Mortgage Calculator with Taxes, Insurance and PMI

Mortgage Details	Homeowner Expenses
<b>Home Value</b> <input type="text" value="180,900"/> \$	<b>One-time Expenses</b> <input type="text" value="0"/> % \$
<b>Down Payment</b> <input type="text" value="0"/> % \$	<b>Property Taxes / year</b> <input type="text" value="0"/> % \$
<b>Mortgage Amount</b> <input type="text" value="180,900"/> \$	<b>Home Insurance / year</b> <input type="text" value="0"/> % \$
<b>Interest Rate</b> <input type="text" value="4.735"/> %	<b>HOA Fees / month</b> <input type="text" value="0"/> \$
<b>PMI / year</b> <input type="text" value="0"/> % \$	
<b>Amortization Period</b> <input type="text" value="15"/> Yr Mo	
<b>Payment Frequency</b> <input checked="" type="radio"/> Monthly <input type="radio"/> Bi-weekly	
<b>Start Date</b> <input type="text" value="01-Jan 2016"/>	

## Extra Payments – Amount and Start Date

Monthly or Bi-weekly	Yearly	Quarterly	One-time only
<input type="text" value="100"/> \$	<input type="text" value="0"/> \$	<input type="text" value="0"/> \$	<input type="text" value="0"/> \$
starting from	starting from	starting from	on
<input type="text" value="03-Dec 2015"/>	<input type="text" value="03-Dec 2015"/>	<input type="text" value="03-Dec 2015"/>	<input type="text" value="03-Dec 2015"/>

[- Remove Extra Payments](#)

Monthly Principal & Interest	\$1,405.70
Monthly Extra Payment (from 03-Dec 2015)	\$100.00
Property Taxes	\$0.00
Homeowner's Insurance	\$0.00
PMI	\$0.00
HOA Fees	\$0.00
<b>Total Monthly Payment</b>	<b>\$1,505.70</b>

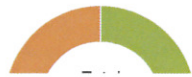
Down Payment & One-time Expenses	\$0.00
Principal	\$164,600.00

No down payment home loans  
[ranlife.com/100.php](http://ranlife.com/100.php)  
 Get Into a New Home Now with Little or No Down Payment. Start Today!

Toyota® Tundra Sale

HARP Mortgage 2015

VA Mortgages



Extra Payments	\$16,300.00
Interest	\$64,787.50
Taxes, PMI, Insurance & Fees	\$0.00
<b>Total of all Payments</b>	<b>\$245,687.50</b>

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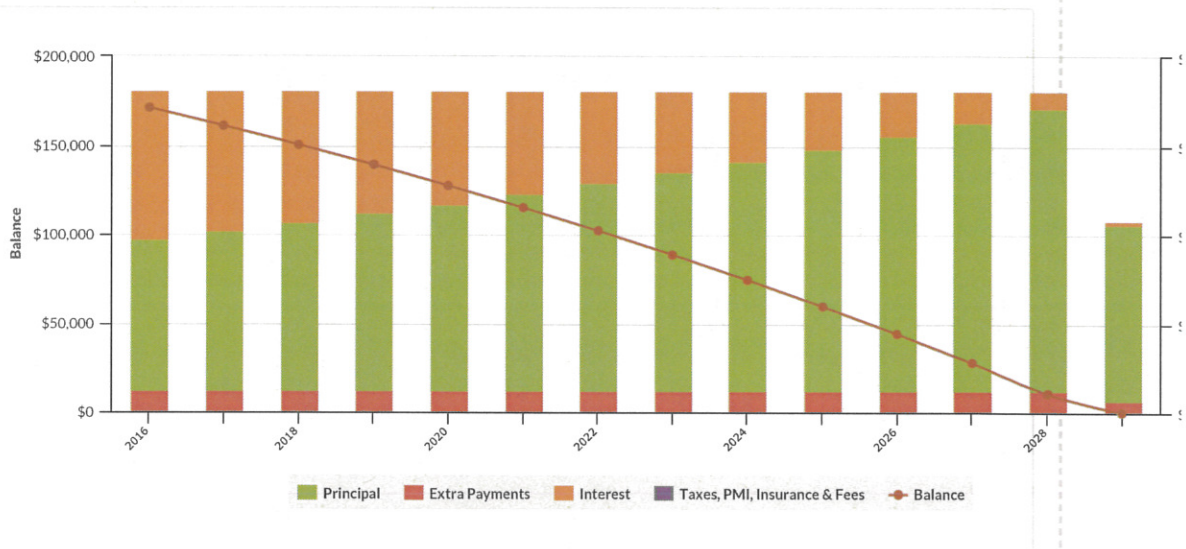


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**Mortgage Payment Schedule (01-Jan 2016 – 01-Aug 2029)**



Year	Principal (A)	Extra Payments (B)	Interest (C)	Taxes, PMI, Insurance & Fees (D)	Total Payment (A + B + C + D)	Balance	Loan Paid To Date
2016	\$8,511.73	\$1,200.00	\$8,356.65	\$0.00	\$18,068.38	\$171,188.27	5.37%
2017	\$8,981.69	\$1,200.00	\$7,886.69	\$0.00	\$18,068.38	\$161,006.58	11%
2018	\$9,474.40	\$1,200.00	\$7,393.98	\$0.00	\$18,068.38	\$150,332.18	16.9%
2019	\$9,990.94	\$1,200.00	\$6,877.43	\$0.00	\$18,068.38	\$139,141.24	23.08%
2020	\$10,532.49	\$1,200.00	\$6,335.89	\$0.00	\$18,068.38	\$127,408.75	29.57%
2021	\$11,100.24	\$1,200.00	\$5,768.14	\$0.00	\$18,068.38	\$115,108.52	36.37%
2022	\$11,695.46	\$1,200.00	\$5,172.92	\$0.00	\$18,068.38	\$102,213.06	43.5%
2023	\$12,319.49	\$1,200.00	\$4,548.89	\$0.00	\$18,068.38	\$88,693.57	50.97%
2024	\$12,973.71	\$1,200.00	\$3,894.67	\$0.00	\$18,068.38	\$74,519.86	58.81%
2025	\$13,659.60	\$1,200.00	\$3,208.78	\$0.00	\$18,068.38	\$59,660.26	67.02%
2026	\$14,378.67	\$1,200.00	\$2,489.71	\$0.00	\$18,068.38	\$44,081.59	75.63%
2027	\$15,132.54	\$1,200.00	\$1,735.84	\$0.00	\$18,068.38	\$27,749.05	84.66%
2028	\$15,922.89	\$1,200.00	\$945.49	\$0.00	\$18,068.38	\$10,626.16	94.13%
2029	\$9,926.16	\$700.00	\$172.43	\$0.00	\$10,798.59	\$0.00	100%

Wanna print OR share a custom link to your mortgage calculation (with all your numbers pre-filled)?

 Print Share

## How to use the free mortgage calculator

This mortgage calculator helps you estimate your monthly payment (<http://usmortgagecalculator.org/12-ways-reduce-mortgage-payment/>) with the principal and interest components, property taxes, PMI, homeowner's insurance and HOA fees. It also calculates the sum total of all payments including one-time down payment, total PITI amount and total HOA fees during the entire amortization period. You are presented with a detailed mortgage payment schedule (<http://usmortgagecalculator.org/how-mortgage-amortization-works/>). Many homeowners wish to accelerate their mortgage schedule through extra payments or accelerated bi-weekly payments. A table showing the difference in payments, total interest paid and amortization period under both schemes is also displayed.

Here are a few important points to help you understand the mortgage calculations:

- › The difference between home value and the mortgage amount is considered your down payment. If this is not the case (e.g., refinancing your loan (<http://usmortgagecalculator.org/guide-refinancing-mortgage/>)), you should ignore the down payment and subtract this amount from the total of all payments.
- › Private Mortgage Insurance (<http://usmortgagecalculator.org/mortgage-insurance-vs-secondary-mortgages/>) (PMI) is calculated only if down payment is less than 20% of the property value (i.e., loan-to-value ratio is higher than 80%) and stops as soon as the outstanding principal amount (balance) is less than or equal to 80% of the home value. PMI is estimated at following rates: 95.01-100% LTV = 1.03% , 90.01-95% LTV = 0.875% , 85.01-90% LTV = 0.625% , 80.01-85% LTV = 0.375%. The actual PMI is based on your loan-to-value (LTV), credit score (<http://usmortgagecalculator.org/fico-credit-score/>) and debt-to-income (DTI) ratio.
- › PMI, property taxes (<http://usmortgagecalculator.org/understanding-real-estate-property-taxes/>) and homeowners insurance (aka hazard insurance OR home insurance) are defaulted to national averages in the US. These averages may not be accurate for your particular situation. You should override and enter your own estimates, if required.
- › Although you may not pay property taxes and insurance on a monthly basis, it is factored into the total monthly payment with the assumption that you are setting aside this amount (through escrow (<http://usmortgagecalculator.org/everything-wanted-know-escrows/>) / impound account or some other means) every month.
- › You can enter down payment, one-time expenses, property taxes and homeowners insurance as a percentage of the home value and PMI as a percentage of the mortgage amount. You also have the choice of entering exact dollar amounts instead, if desired.
- › One-time expenses can include closing costs (<http://usmortgagecalculator.org/understanding-price-closing-costs/>) (including discount points (<http://usmortgagecalculator.org/understanding-mortgage-points/>)) and any money spent on one-time repair or renovation of the property.
- › Bi-weekly payment (aka 'Accelerated Bi-weekly', 'True Bi-weekly' or 'Bi-weekly applied bi-weekly') helps reduce your total interest cost and accelerate mortgage payoff.
- › All extra payments pay down the principal and help reduce the loan tenure.
- › You can print OR share a custom link to your mortgage calculation, with all your numbers already pre-filled, with your friends & family.
- › **Taxes, PMI, Insurance & Fees** includes property taxes, PMI, Homeowner's Insurance and HOA Fees.
- › **PITI** refers to **P**rincipal, **I**nterest, **T**axes and **I**nsurance.

The mortgage calculations do not include the following costs and savings:

- › Certain recurring costs associated with home ownership (e.g., utilities, home warranty, home maintenance costs etc.)
- › Savings such as tax deductions on your mortgage payments



Some of the recurring expenses will change over the lifetime of home ownership due to home value changes, inflation and other factors. Some expenses (e.g., property taxes, homeowner's insurance etc.) will continue even after you have paid off your loan. You should consider all these factors, especially when making a rent vs. buy (<http://usmortgagecalculator.org/knowning-time-rent-buy/>) decision.

Best wishes for an affordable home mortgage loan and a great new home!





**Notes:**

- i) You can also download our free mortgage calculator android app (<https://play.google.com/store/apps/details?id=org.usmortgagecalculator&rdid=org.usmortgagecalculator>).
- ii) If you need a simple amortization calculator, try our loan amortization calculator (<http://usmortgagecalculator.org/loan-amortization-calculator/>).
- iii) For Realtors: Try our free mortgage calculator widget (<http://usmortgagecalculator.org/mortgage-calculator-widget/>) (includes WordPress plugin).

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- The Pros and Cons of New, Easier Loan Qualifications for FHA Loans (<http://usmortgagecalculator.org/the-pros-and-cons-of-new-easier-loan-qualifications-for-fha-loans/>) OCT 12, 2015
- The Difference Between a Mortgage Broker and a Banker (<http://usmortgagecalculator.org/the-difference-between-a-mortgage-broker-and-a-banker/>) SEP 06, 2015
- Understanding Truth in Lending (<http://usmortgagecalculator.org/understanding-truth-in-lending/>) AUG 26, 2015
- The Home Buying Process, Part Six: The Closing Table Polka (<http://usmortgagecalculator.org/the-home-buying-process-part-six-the-closing-table-polka/>) JUL 24, 2015


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 **BruinInSeattle** · 2 years ago  
great calculator...thanks so much for sharing it!  
5 ^ v · Reply · Share

 **Manish** · 2 years ago  
I have searched for mortgage calculators at multiple sites from cnn/bankrate/nytimes total 10+ and finally i found this site. This is THE BEST mortgage calculators i have seen so far. Thanks for it.

You might want to share this with other non-profit or for-profit companies (may be bankrate / npr etc) so other people can know

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U.S. Mortgage Calculator  
(<https://usmortgagecalculator.org>)

Android App  
(<https://play.google.com/store/apps/details?id=org.usmortgagecalculator>)

Loan Amortization Calculator  
(<https://usmortgagecalculator.org/amortization-calculator/>)

Mobile-friendly Mortgage Calculator Widget  
(<http://usmortgagecalculator.org/calculator-widget/>)

U.S. Inflation Calculator  
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*Tracy Anderson*

# U.S. Mortgage Calculator with Taxes, Insurance and PMI

### Mortgage Details

**Home Value**  
 \$

**Down Payment**  
 % \$

**Mortgage Amount**  
 \$

**Interest Rate**  
 %

**PMI / year**  
 % \$

**Amortization Period**  
 Yr Mo

**Payment Frequency**  
 Monthly  Bi-weekly

**Start Date**

### Homeowner Expenses

**One-time Expenses**  
 % \$

**Property Taxes / year**  
 % \$

**Home Insurance / year**  
 % \$

**HOA Fees / month**  
 \$

[+ Add Extra Payments](#)

Monthly Principal & Interest	\$968.35
Monthly Extra Payment	\$0.00
Property Taxes	\$0.00
Homeowner's Insurance	\$0.00
PMI	\$0.00
HOA Fees	\$0.00
<b>Total Monthly Payment</b>	<b>\$968.35</b>

- No down payment home loans  
ranlife.com/100.php  
Get Into a New Home Now with Little or No Down Payment. Start Today!
- Toyota® Tundra Sale
- HARP Mortgage 2015
- VA Mortgages

	Down Payment & One-time Expenses	\$0.00
	Principal	\$180,900.00
	Extra Payments	\$0.00
	Interest	\$167,705.37
	Taxes, PMI, Insurance & Fees	\$0.00
<b>Total of all Payments</b>	<b>\$348,605.37</b>	

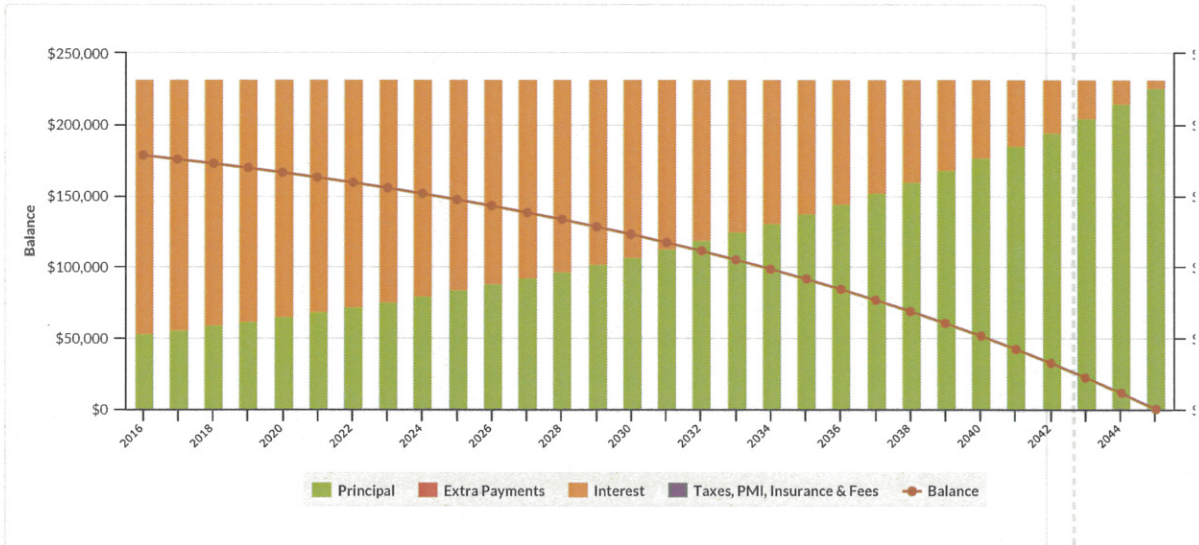
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**Mortgage Payment Schedule**  
(01-Jan 2016 – 01-Dec 2045)



Year	Principal (A)	Interest (B)	Taxes, PMI, Insurance & Fees (C)	Total Payment (A + B + C)	Balance	Loan Paid To Date
2016	\$2,680.99	\$8,939.19	\$0.00	\$11,620.18	\$178,219.01	1.48%
2017	\$2,817.45	\$8,802.73	\$0.00	\$11,620.18	\$175,401.56	3.04%
2018	\$2,960.86	\$8,659.32	\$0.00	\$11,620.18	\$172,440.70	4.68%
2019	\$3,111.57	\$8,508.61	\$0.00	\$11,620.18	\$169,329.13	6.4%
2020	\$3,269.95	\$8,350.23	\$0.00	\$11,620.18	\$166,059.19	8.2%
2021	\$3,436.39	\$8,183.79	\$0.00	\$11,620.18	\$162,622.80	10.1%
2022	\$3,611.30	\$8,008.88	\$0.00	\$11,620.18	\$159,011.49	12.1%
2023	\$3,795.12	\$7,825.06	\$0.00	\$11,620.18	\$155,216.38	14.2%
2024	\$3,988.29	\$7,631.89	\$0.00	\$11,620.18	\$151,228.09	16.4%
2025	\$4,191.30	\$7,428.88	\$0.00	\$11,620.18	\$147,036.79	18.72%
2026	\$4,404.63	\$7,215.55	\$0.00	\$11,620.18	\$142,632.16	21.15%
2027	\$4,628.83	\$6,991.35	\$0.00	\$11,620.18	\$138,003.33	23.71%
2028	\$4,864.44	\$6,755.74	\$0.00	\$11,620.18	\$133,138.89	26.4%
2029	\$5,112.04	\$6,508.14	\$0.00	\$11,620.18	\$128,026.85	29.23%
2030	\$5,372.24	\$6,247.94	\$0.00	\$11,620.18	\$122,654.61	32.2%
2031	\$5,645.69	\$5,974.49	\$0.00	\$11,620.18	\$117,008.92	35.32%
2032	\$5,933.06	\$5,687.12	\$0.00	\$11,620.18	\$111,075.86	38.6%
2033	\$6,235.05	\$5,385.13	\$0.00	\$11,620.18	\$104,840.80	42.04%
2034	\$6,552.42	\$5,067.76	\$0.00	\$11,620.18	\$98,288.39	45.67%
2035	\$6,885.94	\$4,734.24	\$0.00	\$11,620.18	\$91,402.45	49.47%
2036	\$7,236.43	\$4,383.75	\$0.00	\$11,620.18	\$84,166.01	53.47%
2037	\$7,604.77	\$4,015.41	\$0.00	\$11,620.18	\$76,561.24	57.68%
2038	\$7,991.85	\$3,628.32	\$0.00	\$11,620.18	\$68,569.39	62.1%
2039	\$8,398.64	\$3,221.54	\$0.00	\$11,620.18	\$60,170.75	66.74%

2040	\$8,826.13	\$2,794.04	\$0.00	\$11,620.18	\$51,344.61	71.62%
2041	\$9,275.39	\$2,344.79	\$0.00	\$11,620.18	\$42,069.23	76.74%
2042	\$9,747.51	\$1,872.67	\$0.00	\$11,620.18	\$32,321.72	82.13%
2043	\$10,243.66	\$1,376.52	\$0.00	\$11,620.18	\$22,078.07	87.8%
2044	\$10,765.06	\$855.12	\$0.00	\$11,620.18	\$11,313.00	93.75%
2045	\$11,313.00	\$307.17	\$0.00	\$11,620.18	\$0.00	100%

Wanna print OR share a custom link to your mortgage calculation (with all your numbers pre-filled)?



Print



Share

## How to use the free mortgage calculator

This mortgage calculator helps you estimate your monthly payment (<http://usmortgagecalculator.org/12-ways-reduce-mortgage-payment/>) with the principal and interest components, property taxes, PMI, homeowner's insurance and HOA fees. It also calculates the sum total of all payments including one-time down payment, total PITI amount and total HOA fees during the entire amortization period. You are presented with a detailed mortgage payment schedule (<http://usmortgagecalculator.org/how-mortgage-amortization-works/>). Many homeowners wish to accelerate their mortgage schedule through extra payments or accelerated bi-weekly payments. A table showing the difference in payments, total interest paid and amortization period under both schemes is also displayed.

Here are a few important points to help you understand the mortgage calculations:

- › The difference between home value and the mortgage amount is considered your down payment. If this is not the case (e.g., refinancing your loan (<http://usmortgagecalculator.org/guide-refinancing-mortgage/>)), you should ignore the down payment and subtract this amount from the total of all payments.
- › Private Mortgage Insurance (<http://usmortgagecalculator.org/mortgage-insurance-vs-secondary-mortgages/>) (PMI) is calculated only if down payment is less than 20% of the property value (i.e., loan-to-value ratio is higher than 80%) and stops as soon as the outstanding principal amount (balance) is less than or equal to 80% of the home value. PMI is estimated at following rates: 95.01-100% LTV = 1.03% , 90.01-95% LTV = 0.875% , 85.01-90% LTV = 0.625% , 80.01-85% LTV = 0.375%. The actual PMI is based on your loan-to-value (LTV), credit score (<http://usmortgagecalculator.org/fico-credit-score/>) and debt-to-income (DTI) ratio.
- › PMI, property taxes (<http://usmortgagecalculator.org/understanding-real-estate-property-taxes/>) and homeowners insurance (aka hazard insurance OR home insurance) are defaulted to national averages in the US. These averages may not be accurate for your particular situation. You should override and enter your own estimates, if required.
- › Although you may not pay property taxes and insurance on a monthly basis, it is factored into the total monthly payment with the assumption that you are setting aside this amount (through escrow (<http://usmortgagecalculator.org/everything-wanted-know-escrows/>) / impound account or some other means) every month.
- › You can enter down payment, one-time expenses, property taxes and homeowners insurance as a percentage of the home value and PMI as a percentage of the mortgage amount. You also have the choice of entering exact dollar amounts instead, if desired.
- › One-time expenses can include closing costs (<http://usmortgagecalculator.org/understanding-price-closing-costs/>) (including discount points (<http://usmortgagecalculator.org/understanding-mortgage-points/>)) and any money spent on one-time repair or renovation of the property.
- › Bi-weekly payment (aka 'Accelerated Bi-weekly', 'True Bi-weekly' or 'Bi-weekly applied bi-weekly') helps reduce your total interest cost and accelerate mortgage payoff.
- › All extra payments pay down the principal and help reduce the loan tenure.
- › You can print OR share a custom link to your mortgage calculation, with all your numbers already pre-filled, with your friends & family.
- › **Taxes, PMI, Insurance & Fees** includes property taxes, PMI, Homeowner's Insurance and HOA Fees.
- › **PITI** refers to Principal, Interest, Taxes and Insurance.

The mortgage calculations do not include the following costs and savings:

- > Certain recurring costs associated with home ownership (e.g., utilities, home warranty, home maintenance costs etc.)
- > Savings such as tax deductions on your mortgage payments

Some of the recurring expenses will change over the lifetime of home ownership due to home value changes, inflation and other factors. Some expenses (e.g., property taxes, homeowner's insurance etc.) will continue even after you have paid off your loan. You should consider all these factors, especially when making a rent vs. buy (<http://usmortgagecalculator.org/knowning-time-rent-buy/>) decision.

Best wishes for an affordable home mortgage loan and a great new home!

**Notes:**

- i) You can also download our free mortgage calculator android app (<https://play.google.com/store/apps/details?id=org.usmortgagecalculator&rdid=org.usmortgagecalculator>).
- ii) If you need a simple amortization calculator, try our loan amortization calculator (<http://usmortgagecalculator.org/loan-amortization-calculator/>).
- iii) For Realtors: Try our free mortgage calculator widget (<http://usmortgagecalculator.org/mortgage-calculator-widget/>) (includes WordPress plugin).

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