

[Mortgages](#)

# Mortgage Calculator

**Home price**

\$860,000

**Down payment**

\$258,000

30 %

**Loan term**

15 years

**Interest rate**

4.50

%

**Optional: Taxes, insurance, HOA fees** **ZIP code**

90210

**Credit score**

740+

**Property tax per month**

\$566

**Homeowner's insurance per month** 

\$66

PMI per month



\$0

HOA fees per month



\$0

Payment breakdown **Amortization**

## Amortization for mortgage loan

Amortization is paying off debt over time in equal installments. As the term of your mortgage loan progresses, a larger share of your payment goes toward paying down the principal until the loan is paid in full at the end of your term.

Loan amount

**\$602,000**



Total interest paid

**\$50,873**

Total cost of loan

**\$652,873**

Payoff date

**Jan 2026**

As of December 2023

Principal paid

**\$163,679**

Interest paid

**\$30,001**

Loan balance

**\$438,321**

### Optional: Make extra payments

By adding extra payments, you can pay off your loan and save on interest.



Loan start date

Aug 2022



Additional amount to monthly payment

\$0

Additional yearly payment

\$120,000

January



One-time additional payment on

\$0

Aug 2022



## Amortization schedule breakdown

This table lists how much principal and interest are paid in each scheduled mortgage payment.

First payment

Aug 2022



Last payment

→ Jan 2026

| Date     | Principal    | Interest    | Remaining balance |
|----------|--------------|-------------|-------------------|
| — 2022   | \$9,442.95   | \$8,977.05  | \$592,557.05      |
| Sep 2022 | \$2,347.50   | \$2,257.50  | \$599,652.50      |
| Oct 2022 | \$2,356.30   | \$2,248.70  | \$597,296.20      |
| Nov 2022 | \$2,365.14   | \$2,239.86  | \$594,931.06      |
| Dec 2022 | \$2,374.01   | \$2,230.99  | \$592,557.05      |
| — 2023   | \$163,678.95 | \$30,001.05 | \$438,321.05      |

| Date          | Principal           | Interest           | Remaining balance   |
|---------------|---------------------|--------------------|---------------------|
| Jan 2023      | \$122,382.91        | \$2,222.09         | \$470,174.14        |
| Feb 2023      | \$2,841.85          | \$1,763.15         | \$467,332.29        |
| Mar 2023      | \$2,852.50          | \$1,752.50         | \$464,479.79        |
| Apr 2023      | \$2,863.20          | \$1,741.80         | \$461,616.59        |
| May 2023      | \$2,873.94          | \$1,731.06         | \$458,742.65        |
| Jun 2023      | \$2,884.72          | \$1,720.28         | \$455,857.93        |
| Jul 2023      | \$2,895.53          | \$1,709.47         | \$452,962.40        |
| Aug 2023      | \$2,906.39          | \$1,698.61         | \$450,056.01        |
| Sep 2023      | \$2,917.29          | \$1,687.71         | \$447,138.72        |
| Oct 2023      | \$2,928.23          | \$1,676.77         | \$444,210.49        |
| Nov 2023      | \$2,939.21          | \$1,665.79         | \$441,271.28        |
| Dec 2023      | \$2,950.23          | \$1,654.77         | \$438,321.05        |
| <b>— 2024</b> | <b>\$325,000.53</b> | <b>\$43,939.47</b> | <b>\$276,999.47</b> |
| Jan 2024      | \$122,961.30        | \$1,643.70         | \$315,359.75        |
| Feb 2024      | \$3,422.40          | \$1,182.60         | \$311,937.35        |
| Mar 2024      | \$3,435.23          | \$1,169.77         | \$308,502.12        |
| Apr 2024      | \$3,448.12          | \$1,156.88         | \$305,054.00        |



| Date     | Principal    | Interest    | Remaining balance |
|----------|--------------|-------------|-------------------|
| May 2024 | \$3,461.05   | \$1,143.95  | \$301,592.95      |
| Jun 2024 | \$3,474.03   | \$1,130.97  | \$298,118.92      |
| Jul 2024 | \$3,487.05   | \$1,117.95  | \$294,631.87      |
| Aug 2024 | \$3,500.13   | \$1,104.87  | \$291,131.74      |
| Sep 2024 | \$3,513.26   | \$1,091.74  | \$287,618.48      |
| Oct 2024 | \$3,526.43   | \$1,078.57  | \$284,092.05      |
| Nov 2024 | \$3,539.65   | \$1,065.35  | \$280,552.40      |
| Dec 2024 | \$3,552.93   | \$1,052.07  | \$276,999.47      |
| — 2025   | \$493,733.19 | \$50,466.81 | \$108,266.81      |
| Jan 2025 | \$123,566.25 | \$1,038.75  | \$153,433.22      |
| Feb 2025 | \$4,029.63   | \$575.37    | \$149,403.59      |
| Mar 2025 | \$4,044.74   | \$560.26    | \$145,358.85      |
| Apr 2025 | \$4,059.90   | \$545.10    | \$141,298.95      |
| May 2025 | \$4,075.13   | \$529.87    | \$137,223.82      |
| Jun 2025 | \$4,090.41   | \$514.59    | \$133,133.41      |
| Jul 2025 | \$4,105.75   | \$499.25    | \$129,027.66      |
| Aug 2025 | \$4,121.15   | \$483.85    | \$124,906.51      |



| Date     | Principal    | Interest    | Remaining balance |
|----------|--------------|-------------|-------------------|
| Sep 2025 | \$4,136.60   | \$468.40    | \$120,769.91      |
| Oct 2025 | \$4,152.11   | \$452.89    | \$116,617.80      |
| Nov 2025 | \$4,167.68   | \$437.32    | \$112,450.12      |
| Dec 2025 | \$4,183.31   | \$421.69    | \$108,266.81      |
| — 2026   | \$602,000.00 | \$50,872.81 | \$0.00            |
| Jan 2026 | \$108,266.81 | \$406.00    | \$0.00            |

# Current Mortgage Rates for August 17, 2022

[Advertiser Disclosure](#)

Purchase

Refinance

Zip Code

90210 Beverly Hills, ...

Property Value

\$ 860,000

Loan Amount

\$ 602,000

Percent D...

30 %







Loan Term

15 year fixed

Credit Score

740+

[Show more options](#) 

| Lender    | APR  | Rate  | Mo. payment  | Sort by  |
|--|---|--|---|---|
| 15 Year Fixed<br>NMLS: #1838<br>★★★★☆ <br>(4.9) | 3.80%<br>Aug 17, 2022   | 3.50%<br>Points: 1.75  | \$4,304<br>Fees: \$12k  | Next →  |



15 Year Fixed  
NMLS: #3001



(4.9)

(855) 812-1018

**3.89%**

Aug 17, 2022

**3.63%**

Points: 1.791

**\$4,341**

Fees: \$11k

Next →

15 Year Fixed  
NMLS: #1817479



(4.8)

**4.15%**

Aug 17, 2022

**3.88%**

Points: 1.695

**\$4,415**

Fees: \$11k

Next →

15 Year Fixed  
NMLS: #2289



(4.9)

(855) 846-7672

**4.38%**

Aug 17, 2022

**4.38%**

Points: 0

**\$4,567**

Fees: \$0

Next →

ON THIS PAGE

Jump to

## How to calculate your mortgage payments

The calculus behind mortgage payments is complicated, but Bankrate's Mortgage Calculator makes this math problem quick and easy.

First, next to the space labeled "Home price," enter the price (if you're buying) or the current value of your home (if you're refinancing).



In the "Down payment" section, type in the amount of your down payment (if you're buying) or the amount of equity you have (if you're refinancing). A down payment is the cash you pay upfront for a home, and home equity is the value of the home, minus what you owe. You can enter either a dollar amount or the percentage of the purchase price you're putting down.

Next, you'll see "Length of loan." Choose the term — usually 30 years, but maybe 20, 15 or 10 — and our calculator adjusts the repayment schedule.

Finally, in the "Interest rate" box, enter the rate you expect to pay. Our calculator defaults to the current average rate, but you can adjust the percentage. Your rate will vary depending on whether you're [buying](#) or [refinancing](#).

As you enter these figures, a new amount for principal and interest will appear to the right. Bankrate's calculator also estimates property taxes, homeowners insurance and homeowners association fees. You can edit these amounts or even ignore them as you're shopping for a loan — those costs might be rolled into your [escrow](#) payment, but they don't affect your principal and interest as you explore your options.

## Typical costs included in a mortgage payment

The major part of your mortgage payment is the principal and the interest. The principal is the amount you borrowed, while the interest is the sum you pay the lender for borrowing it. Your lender also might collect an extra amount every month to put into escrow, money that the lender (or servicer) then typically pays directly to the local property tax collector and to your insurance carrier.

**Principal:** This is the amount you borrowed from the lender.

**Interest:** This is what the lender charges you to lend you the money. Interest rates are expressed as an annual percentage.

**Property taxes:** Local authorities assess an annual tax on your property. If you have an escrow account, you pay about one-twelfth of your annual tax bill with each monthly mortgage payment.

**Homeowners insurance:** Your insurance policy can cover damage and financial losses from





fire, storms, theft, a tree falling on your home and other hazards. If you live in a flood zone, you'll have an additional policy, and if you're in Hurricane Alley or earthquake country, you might have a third insurance policy. As with property taxes, you pay one-twelfth of your annual insurance premium each month, and your lender or servicer pays the premium when it's due.

**Mortgage insurance:** If your down payment is less than 20 percent of the home's purchase price, you'll probably be on the hook for mortgage insurance, which also is added to your monthly payment.

## Mortgage payment formula

Want to figure out how much your monthly mortgage payment will be? For the mathematically inclined, here's a formula to help you calculate mortgage payments manually:

### Equation for mortgage payments

$$M = P \frac{r(1+r)^n}{(1+r)^n - 1}$$

#### Symbol

---

|   |                                    |
|---|------------------------------------|
| M | the total monthly mortgage payment |
|---|------------------------------------|

---

|   |                           |
|---|---------------------------|
| P | the principal loan amount |
|---|---------------------------|

---

|   |   |
|---|---|
|   | your monthly interest rate  |
| r | Lenders provide you an annual rate so you'll need to divide that figure by 12 (the number of months in a year) to get the monthly rate. If your interest rate is 5 percent, your monthly rate would be 0.004167 (0.05/12=0.004167). |

---

|   |   |
|---|---|
|   | number of payments over the loan's lifetime   |
| n | Multiply the number of years in your loan term by 12 (the number of months in a year) to get the number of payments for your loan. For example, a 30-year fixed mortgage would have 360 payments (30x12=360). |

---



This formula can help you crunch the numbers to see [how much house you can afford](#). Using our Mortgage Calculator can take the work out of it for you and help you decide whether you're putting enough money down or if you can or should adjust your loan term. It's always a good idea to [rate-shop with several lenders](#) to ensure you're getting the best deal available.

## How a mortgage calculator can help

As you set your housing budget, determining your monthly house payment is crucial — it will probably be your largest recurring expense. As you shop for a purchase loan or a refinance, Bankrate's Mortgage Calculator allows you to estimate your mortgage payment. To study various scenarios, just change the details you enter into the calculator. The calculator can help you decide:

**The loan length that's right for you.** If your budget is fixed, a [30-year fixed-rate mortgage](#) is probably the right call. These loans come with lower monthly payments, although you'll pay more interest during the course of the loan. If you have some room in your budget, a [15-year fixed-rate mortgage](#) reduces the total interest you'll pay, but your monthly payment will be higher.

**If an ARM is a good option.** As rates rise, it might be tempting to choose an [adjustable-rate mortgage \(ARM\)](#). Initial rates for ARMs are typically lower than those for their conventional counterparts. A 5/6 ARM — which carries a fixed rate for five years, then adjusts every six months — might be the right choice if you plan to stay in your home for just a few years. However, pay close attention to how much your monthly mortgage payment can change when the introductory rate expires.

**If you're spending more than you can afford.** The Mortgage Calculator provides an overview of how much you can expect to pay each month, including taxes and insurance.

**How much to put down.** While 20 percent is thought of as the [standard down payment](#), it's not required. Many borrowers put down as little as 3 percent.

## Deciding how much house you can afford



If you're not sure [how much of your income should go toward housing](#), follow the tried-and-true 28/36 percent rule. Many financial advisors believe that you should not spend more than 28 percent

of your gross income on housing costs, such as rent or a mortgage payment, and that you should not spend more than 36 percent of your gross income on overall debt, including mortgage payments, credit cards, student loans, medical bills and the like. **Here's an example of what this looks like:**

Joe makes \$60,000 a year. That's a gross monthly income of \$5,000 a month.  
 $\$5,000 \times 0.28 = \$1,400$  total monthly mortgage payment (PITI)

Joe's total monthly mortgage payments — including principal, interest, taxes and insurance — shouldn't exceed \$1,400 per month. That's a maximum loan amount of roughly \$253,379. While you can qualify for a mortgage with a [debt-to-income \(DTI\) ratio](#) of up to 50 percent for some loans, spending such a large percentage of your income on debt might leave you without enough wiggle room in your budget for other living expenses, retirement, emergency savings and discretionary spending. Lenders don't take those budget items into account when they preapprove you for a loan, so you need to factor those expenses into your housing affordability picture for yourself. Once you know what you can afford, you can take financially sound next steps. The last thing you want to do is jump into a [30-year home loan](#) that's too expensive for your budget, even if a lender is willing to loan you the money. Bankrate's [How Much House Can I afford Calculator](#) will help you run through the numbers.

## How to lower your monthly mortgage payment

If the monthly payment you're seeing in our calculator looks a bit out of reach, you can try some tactics to reduce the hit. Play with a few of these variables:

**Choose a longer loan.** With a longer term, your payment will be lower (but you'll pay more interest over the life of the loan).

**Spend less on the home.** Borrowing less translates to a smaller monthly mortgage payment.

**Avoid PMI.** A down payment of 20 percent or more (or in the case of a refi, equity of 20 percent or more) gets you off the hook for [private mortgage insurance \(PMI\)](#).

**Shop for a lower interest rate.** Be aware, though, that some super-low rates require you to pay



[points](#), an upfront cost.

**Make a bigger down payment.** This is another way to reduce the size of the loan.

## Next steps

A mortgage calculator is a springboard to helping you estimate your monthly mortgage payment and understand what it includes. Your next step after exploring the numbers:

Get [preapproved by a mortgage lender](#). If you're [shopping for a home](#), this is a must.

[Apply for a mortgage](#). After a lender has vetted your employment, income, credit and finances, you'll have a better idea how much you can borrow. You'll also have a clearer idea of how much money you'll need to bring to the [closing table](#).

## Learn more about specific loan type rates

| Loan Type    | Purchase Rates                         | Refinance Rates                         |
|--------------|--|---|
| 30-Year Loan | <a href="#">30-Year Mortgage Rates</a> | <a href="#">30-Year Refinance Rates</a> |
| 20-Year Loan | <a href="#">20-Year Mortgage Rates</a> | <a href="#">20-Year Refinance Rates</a> |
| 15-Year Loan | <a href="#">15-Year Mortgage Rates</a> | <a href="#">15-Year Refinance Rates</a> |
| 10-Year Loan | <a href="#">10-Year Mortgage Rates</a> | <a href="#">10-Year Refinance Rates</a> |
| FHA Loan     | <a href="#">FHA Mortgage Rates</a>     | <a href="#">FHA Refinance Rates</a>     |
| VA Loan      | <a href="#">VA Mortgage Rates</a>      | <a href="#">VA Refinance Rates</a>      |
| ARM Loan     | <a href="#">ARM Mortgage Rates</a>     | <a href="#">ARM Refinance Rates</a>     |
| Jumbo Loan   | <a href="#">Jumbo Mortgage Rates</a>   | <a href="#">Jumbo Refinance Rates</a>   |



The table above links out to loan-specific content to help you learn more about rates by loan type.

# Mortgage calculator: Alternative uses

Most people use a mortgage calculator to estimate the payment on a new mortgage, but it can be used for other purposes, too.

Here are some other uses:

## 1. Planning to [pay off your mortgage early](#).

Use the "Extra payments" functionality of Bankrate's mortgage calculator to find out how you can shorten your term and save more over the long-run by paying extra money toward your loan's principal. You can make these extra payments monthly, annually or even just one time.

To calculate the savings, click the "Amortization / Payment Schedule" link and enter a hypothetical amount into one of the payment categories (monthly, yearly or one-time), then click "Apply Extra Payments" to see how much interest you'll end up paying and your new payoff date.

## 2. Decide if an [ARM](#) is worth the risk.

The lower initial interest rate of an adjustable-rate mortgage, or ARM, can be tempting. While an ARM may be appropriate for some borrowers, others may find that the lower initial interest rate won't cut their monthly payments as much as they think.

To get an idea of how much you'll really save initially, try entering the ARM interest rate into the mortgage calculator, leaving the term as 30 years. Then, compare those payments to the payments you get when you enter the rate for a conventional 30-year fixed mortgage. Doing so may confirm your initial hopes about the benefits of an ARM -- or give you a reality check about whether the potential plusses of an ARM really outweigh the risks.

## 3. Find out when to [get rid of private mortgage insurance](#).

You can use the mortgage calculator to determine when you'll have 20 percent equity in your home. That's the magic number for requesting that a lender waive its private mortgage insurance requirement. If you put less than 20 percent down when you purchased the home, you'll need to pay an extra fee every month on top of your regular mortgage payment to offset the lender's risk. Once you have 20 percent equity, that fee goes away, which means more money in your pocket.



Simply enter in the original amount of your mortgage and the date you closed, and click "Show Amortization Schedule." Then, multiply your original mortgage amount by 0.8 and match the result to the closest number on the far-right column of the amortization table to find out when you'll reach 20 percent equity.

## Terms explained

Using an online mortgage calculator can help you quickly and accurately predict your monthly mortgage payment with just a few pieces of information. It can also show you the total amount of interest you'll pay over the life of your mortgage. To use this calculator, you'll need the following information:

**Home price** - This is the dollar amount you expect to pay for a home.

**Down payment** - The down payment is money you give to the home's seller. At least 20 percent down typically lets you avoid mortgage insurance.

**Loan amount** - If you're getting a mortgage to buy a new home, you can find this number by subtracting your down payment from the home's price. If you're refinancing, this number will be the outstanding balance on your mortgage.

**Loan term (years)** - This is the length of the mortgage you're considering. For example, if you're buying a home, you might choose a mortgage loan that lasts 30 years, which is the most common, as it allows for lower monthly payments by stretching the repayment period out over three decades. On the other hand, a homeowner who is refinancing may opt for a loan with a shorter repayment period, like 15 years. This is another common mortgage term that allows the borrower to save money by paying less total interest. However, monthly payments are higher on 15-year mortgages than 30-year ones, so it can be more of a stretch for the household budget, especially for first-time homebuyers.

**Interest rate** - Estimate the interest rate on a new mortgage by checking Bankrate's [mortgage tables](#) for your area. Once you have a projected rate (your real-life rate may be different depending on your overall financial and credit picture), you can plug it into the calculator.

**Loan start date** - Select the month, day and year when your mortgage payments will start.

#### POPULAR NEXT STEPS

##### MORTGAGE

**Explore mortgages rates**

##### MORTGAGE

**Calculate how much home you can afford**

##### MORTGAGE

**All mortgage resources**

