

## Mortgage Calculator Functions

The purpose of this guide is to describe how to make a mortgage calculator and what functionality we require.

Please note that mortgage calculators are one of the most searched-for consumer tools online. The niche is highly competitive. At Mortgage Loan Place, we want to build the best mortgage calculator ever created. As you know, we are running a huge competition to help us reach this goal!

### Required Features and Functionality

The winner of our \$10,000 prize must incorporate all of the following features and functionality.

- *Calculate mortgage payments.* The purpose of the mortgage calculator is to compute the estimated monthly payment on the mortgage. Download this [Excel file](#) to see the formulas for calculating mortgage payments and [read this page on how to find a loan payment](#). **Required Fields – Principal, Interest Rate, Term. Final Value – Monthly Payment.**
- We require input fields for *yearly taxes and insurance*. The default assumption in these fields should be 1.5% of property value for property tax, and .5% of property value for homeowner's insurance. The default %'s should auto-fill based what the user inputs for principal, interest rate and terms. However, the user should be able to override the default amounts if they so choose. **Required Fields – Taxes and Insurance.**
- *Down payment and Private mortgage insurance.* Mortgages created with less than a 20% down payment typically required private mortgage insurance (PMI). [Learn how PMI is calculated here](#) and [here](#). If a user inputs a down payment amount less than 20% of the principal, PMI should be added to the monthly payment. Assume average PMI costs of \$80 for our calculator. **Required Fields – Down Payment and PMI.**
- An *amortization table or payment graph* should be included to help illustrate the increase in equity and corresponding decrease of principal over the life of the loan. This is required to help users better understand how their payments will be applied. Here is a [good example of an amortization graph](#). [Learn how to calculate amortization here](#) and [here](#).
- *Ajax* should be used so that fields are dynamically updated on the calculator. We DO NOT want to force the user to "re-submit" their values to calculate a new monthly payment.
- *Default values.* The default numbers in the calculator should be a \$300,000 home value, a \$60,000 down payment, 5.5% interest, 1.5% of home value for property tax, and .5% of property value for homeowner's insurance.
- The calculator should have a "widget" version that is no larger than 175 pixels wide and 700 pixels long.

## Highly Encouraged Features and Functionality

The features listed below are encouraged suggestions to help make your calculator stand out from the rest. They are not required.

- Use *jquery overlays* to display amortization table, principal pay down, and/or any other charts and graphs that come to mind (jquery or similar).
- A *white label widget output*. For instance, a realtor using the calculator could upload their logo or photo, choose colors, and customize the widget to match their site. A color wheel or color options for the widget could be an interesting way to customize the calculator.
- Continuing on the white label theme, a *PDF or Word doc export function* that prints out the amortization tables and graphs along with the mortgage details with the realtor's logo would also be a nice feature.

## High Quality Mortgage Calculator Examples

<http://www.mortgagecalculator.org/>

<http://www.drcalculator.com/mortgage/>

<http://www.mlcalc.com/free-widgets/mortgage-loan-calculator/>