

Amortization Calculations

The HP-12C calculator enables you to calculate the amounts applied towards principal and towards interest from a single loan payment or from several payments. It also calculates the remaining balance of the loan after the payment amortizations are made. To obtain an amortization schedule:

| | |
|-----|--|
| 1) | Press [f] clear [FIN] to clear all the financial registers to 0. |
| 2) | Enter the number of payments or periods, using [n] or [g] [12x]. |
| 3) | Enter the amount of the loan and press [PV] (The sign of PV should be positive, in accordance with the cash flow sign convention). |
| 4) | Key in the periodic payment amount and press [CHS] [PMT] to enter it (the sign of PMT must be negative, in accordance with the cash flow sign convention). |
| 5) | Press [g] [END] or [g] [BEG] to set the PMT mode. |
| 6) | Key in the number of payments to be amortized. |
| 7) | Press [f] [AMORT] to calculate and display the amount of the payments applied towards interest. |
| 8) | Press [X⇌Y] to display the amount of the payments applied towards principal. |
| 9) | To display the number of payments just amortized, press [R↓] [R↓]. |
| 10) | To display the remaining balance of the loan, press [RCL] [PV]. |
| 11) | To display the total number of payments amortized, press [RCL] [n]. |

As a special feature, the RLM's 12C calculators have an additional tool to calculate the entire amortization schedule at once. To show it, press the **OPT** key, touch the "Finance" menu button and select the "[Amortization Table](#)" option.

Example : Amortization Schedule

You can obtain a 25-year mortgage for \$250,000 at 5.25% annual interest. This requires payments of \$1,498.12 (at the end of each month). Find the amounts that would be applied to interest and to the principal from the first and second year's payments.

| Keystrokes | Description |
|--------------------------------------|---|
| [f] clear [FIN] | Clears the Financial Registers. |
| Type "5.25" [g] [12÷] | Stores the monthly interest rate percent. Result = 0.44 |
| Type "250000" [PV] | Type the loan amount and store it in "PV" (Cash-In). |
| [g] [END] | Sets the payment mode to END. |
| Type "1498.12" [CHS] [PMT] | Type the monthly payment value, change the sign to negative and store it in "PMT" (Cash-Out). |
| Type "12" [f] [AMORT] | Calculates the amount of the first year payments applied to interest. Result = -13,006.53 |
| [X⇌Y] | Shows the amount of the first year payments applied to principal. Result = -4,970.91 |
| [RCL] [PV] | Recall and display the remaining balance after the first year. Result = 245,029.09 |
| [RCL] [n] | Total number of payments amortized. Result = 12 |
| Type "12" [f] [AMORT] | Calculates the amount of the second year payments applied to interest. Result = -12,739.18 |
| [X⇌Y] | Shows the amount of the second year payments applied to principal. Result = -5,238.26 |
| [R↓] [R↓] | Number of payment just amortized. Result = 12 |
| [RCL] [PV] | Recall and display the remaining balance after the second year. Result = 239,790.83 |
| [RCL] [n] | Total number of payments amortized. Result = 24 (2 years) |