How can I calculate the principal payment in Google Sheets?

Authored by

stats writer

June 29, 2024

To calculate the principal payment in Google Sheets, the following steps can be followed:
1. Begin by entering the loan amount, interest rate, and loan term in separate cells.
2. Use the PMT function to calculate the periodic payment required to pay off the loan.
3. Determine the remaining balance for each period by subtracting the periodic payment from the loan amount.
4. Use the PPMT function to calculate the portion of the payment that goes towards the principal.
5. Repeat this process for each period to get the total principal payment.
This method utilizes the built-in financial functions in Google Sheets to accurately calculate the principal payment for a loan.

PPMT

The PPMT function calculates the payment on the principal of an investment based on constant-amount periodic payments and a constant interest rate.

Sample Usage

```
PPMT(0.05/12, 1, 30*12, 100000)
```

```
PPMT(2,5,12,100)
```

```
PPMT(A2,B2,C2,D2,E2,1)
```

Syntax

```
PPMT(rate, period, number_of_periods, present_value, )
```

`rate` - The interest rate.

`period` - The amortization period, in terms of number of periods.

`period` must be at least `1` and at most `number_of_periods`.

`number_of_periods` - The number of payments to be made.

`present_value` - The current value of the annuity.

`future_value` - - The future value remaining after the final payment has been made.

`end_or_beginning` - - Whether payments are due at the end (`0`) or beginning (`1`) of each period.

Notes

Ensure that consistent units are used for `rate` and `number_of_periods`. For example, a car loan for 36 months may be paid monthly, in which case the annual percentage rate should be divided by 12 and the number of payments is 36. On the other hand, a different type of loan of the same length might be paid quarterly, in which case the annual percentage rate should be divided by 4 and the number of payments would be 12.

See Also

`PV`: Calculates the present value of an annuity investment based on constant-amount periodic payments and a constant interest rate.

`PMT`: The PMT function calculates the periodic payment for an annuity investment based on constant-amount periodic payments and a constant interest rate.

`NPER`: The NPER function calculates the number of payment periods for an investment based on constant-amount periodic payments and a constant interest rate.

`IPMT`: The IPMT function calculates the payment on interest for an investment based on constant-amount periodic payments and a constant interest rate.

`FVSCHEDULE`: The FVSCHEDULE function calculates the future value of some principal based on a specified series of potentially varying interest rates.

`FV`: The FV function calculates the future value of an annuity investment based on constant-amount periodic payments and a constant interest rate.

Examples

General usage

Principal payment on a mortgage