How can I use the NPV function in Google Sheets to calculate the present value of a series of cash flows?

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The NPV function in Google Sheets is a powerful tool that can be used to calculate the present value of a series of cash flows. This function takes into account the time value of money and discounts future cash flows to their present values. By inputting the relevant cash flow amounts and discount rate, the NPV function can provide an accurate estimate of the current value of an investment or project. It is a useful feature for individuals and businesses looking to make informed financial decisions based on projected cash flows. With its user-friendly interface and efficient calculations, the NPV function in Google Sheets is a valuable resource for financial planning and analysis.

NPV function

Calculates the net present value of an investment based on a series of periodic cash flows and a discount rate.

Sample Usage

`NPV(0.08,200,250,300)`

`NPV(A2,A3,A4,A5)`

Syntax

`NPV(discount, cashflow1, )`

`discount` - The discount rate of the investment over one period.

`cashflow1` - The first future cash flow.

`cashflow2, ...` - - Additional future cash flows.

Notes

`NPV` is similar to `PV` except that `NPV` allows variable-value cash flows.

Each `cashflow` argument should be positive if it represents income from the perspective of the owner of the investment (e.g. coupons) or negative if it represents payments (e.g. loan repayment).

Each `cashflow` argument may be either a value, a reference to a value, or a range containing values. Cashflows are considered in the order they are referenced.

`IRR` under the same conditions calculates the internal rate of return for which the net present value is zero.

If the cash flows of an investment are irregularly spaced, use `XNPV` instead.

See Also

`XNPV`: Calculates the net present value of an investment based on a specified series of potentially irregularly spaced cash flows and a discount rate.

`XIRR`: Calculates the internal rate of return of an investment based on a specified series of potentially irregularly spaced cash flows.

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

`MIRR`: Calculates the modified internal rate of return on an investment based on a series of periodic cash flows and the difference between the interest rate paid on financing versus the return received on reinvested income.

`IRR`: Calculates the internal rate of return on an investment based on a series of periodic cash flows.

Examples