

# CUMODDFPPMT

Updated: 31 Mar 2016

Use the scalar valued function [CUMODDFPPMT](#) to calculate the cumulative principal on the periodic payments for an annuity where the first period is either longer or shorter than the other periods.

## Syntax

```
Public Shared Function CUMODDFPPMT(  
    ByVal Rate As Double,  
    ByVal Nper As Integer,  
    ByVal PV As Double,  
    ByVal FV As Double,  
    ByVal StartPeriod As Integer,  
    ByVal EndPeriod As Integer,  
    ByVal FirstPeriod As Double,)
```

## Arguments

### *Rate*

the periodic interest rate. *Rate* is an expression that returns a **Double**, or of a type that can be implicitly converted to **Double**.

### *Nper*

the number of annuity payments. *Nper* is an expression that returns a **Integer**, or of a type that can be implicitly converted to **Integer**.

### *PV*

the present value of the annuity. *PV* is an expression that returns a **Double**, or of a type that can be implicitly converted to **Double**.

### *FV*

the future value as at the end of the annuity. *FV* is an expression that returns a **Double**, or of a type that can be implicitly converted to **Double**.

### *StartPeriod*

the first period to be included in the accumulation. *StartPeriod* is an expression that returns a **Integer**, or of a type that can be implicitly converted to **Integer**.

### *EndPeriod*

the last period to be included in the accumulation. *EndPeriod* is an expression that returns a **Integer**, or of a type that can be implicitly converted to **Integer**.

### *FirstPeriod*

the length of the first period. *FirstPeriod* is an expression that returns a **Double**, or of a type that can be implicitly converted to **Double**.

## Return Type

Double

## Remarks

- If *Rate*  $\leq -1$  then NULL is returned.
- If *Nper*  $< 1$  then NULL is returned.
- If *StartPeriod*  $< 1$  then NULL is returned.
- If *EndPeriod*  $> Nper$  then NULL is returned.
- If *EndPeriod*  $< StartPeriod$  then NULL is returned.
- If *FirstPeriod*  $\leq 0$  then NULL is returned.
- If *Rate* is NULL then *Rate* = 0.
- If *Nper* is NULL then *Nper* = 1.
- If *PV* is NULL then *PV* = 0.
- If *FV* is NULL then *FV* = 0.
- If *StartPeriod* is NULL then *StartPeriod* = 1.
- If *EndPeriod* is NULL then *EndPeriod* = *StartPeriod*.
- If *FirstPeriod* is NULL then *FirstPeriod* = 1.
- The principal payment amount for the final period includes the *FV* amount.
- [CUMODDFPPMT](#) uses the same conventions for the sign of the inputs and the results as Excel and Google spreadsheets; generally *PV* and *FV* should have opposite signs and the [CUMODDFPPMT](#) result will have the opposite sign of *PV*.

## See Also

- [CUMODDFIPMT](#) - Cumulative interest on the periodic annuity payments between a start period and an end period
- [FV](#) - Future Value
- [FVGA](#) - Future Value of a Growing Annuity
- [FVSCHEDULE](#) - Future Value based on Compound Rates
- [NOMINAL](#) - Annual Nominal Interest Rate
- [NPER](#) - Number of Periods
- [NPERGA](#) - Number of Periods of a Growing Annuity
- [ODDFIPMT](#) - Interest portion of a periodic payment for an annuity with an odd first period
- [ODDFPMT](#) - Periodic payment for an annuity with an odd first period
- [ODDFPMTSCHED](#) - Generate Amortization schedule for an annuity with odd first period
- [ODDFPPMT](#) - Principal portion of a periodic payment for an annuity with an odd first period
- [ODDFPV](#) - Present value of an annuity with an odd first period

- ODDFRATE - Periodic interest rate for an annuity where the first period is longer or shorter than the other periods
- ODDPV - Present value of an annuity with an odd first period
- PMTGA - Initial Payment of a Growing Annuity
- PV - Present Value
- PVGA - Present Value of a Growing Annuity
- RATE - Interest Rate of an Annuity