

# PPMT

Updated: 31 Mar 2016

Use **PPMT** to return the principal portion of an annuity payment.

## Syntax

```
Public Shared Function PPMT(  
    ByVal Rate As Double,  
    ByVal Per As Double,  
    ByVal Nper As Double,  
    ByVal PV As Double,  
    ByVal FV As Double,  
    ByVal Pay_type As Integer,)
```

## 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**.

### *Per*

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

### *Nper*

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

### *PV*

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

### *FV*

the cash value 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**.

### *Pay\_type*

the number {0, 1} specifying an ordinary annuity (0) or an annuity-immediate (1). *Pay\_type* is an expression that returns **Integer**, or of a type that can be implicitly converted to **Integer**.

## Return Type

Double

## Remarks

- $PPMT(Rate, Per, Nper, PV, FV, Pay\_type) = PMT(Rate, Nper, PV, FV, Pay\_type) - IPMT(Rate, Per, Nper, PV, FV, Pay\_type)$

- *Rate* cannot be equal to -1

### See Also

- CUMIPMT - Cumulative interest paid on an annuity
- CUMLIPMT - Cumulative interest payments of a loan
- CUMLPPMT - Cumulative principal payments of a loan
- CUMPRINC - Cumulative principal paid on an annuity
- EFFECT - Effective annual interest rate
- IPMT - Interest portion of an annuity payment
- LIPMT - Interest portion of a loan payment
- LPMT - Periodic payment of a loan
- LPMTSCHED - Generate loan amortization with balloon payment and other parameters
- LPPMT - Principal portion of a loan payment
- LRATE - Interest rate for an annuity with an odd first period
- NUMPMTS - Total number of payments over the life of the loan
- PMT - Annuity periodic payment
- PMTSCHED - Payment schedule of a loan
- TOTALINT - Total interest amount of a loan