

ODDFRATE

Updated: 31 Mar 2016

Use **ODDFRATE** to calculate the periodic interest rate for an annuity where the first period is either longer or shorter than the other periods.

Syntax

```
Public Shared Function ODDFRATE(  
    ByVal Nper As Integer,  
    ByVal pmt As Double,  
    ByVal PV As Double,  
    ByVal FV As Double,  
    ByVal FirstPeriod As Double,)
```

Arguments

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**.

pmt

the periodic annuity payment. *pmt* is an expression that returns a **Double**, or of a type that can be implicitly converted to **Double**.

PV

the present (current) 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**.

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 *Nper* < 1 then NULL is returned.
- If *FirstPeriod* <= 0 then NULL is returned.
- If the signs of *FV*, *PV*, and *pmt* are the same then NULL is returned.

- If $Pmt = 0$ and $FV = 0$ then -1 is returned.
- If $Nper$ is NULL then $Nper = 0$.
- If Pmt is NULL then $Pmt = 0$.
- If PV is NULL then $PV = 0$.
- If FV is NULL then $FV = 0$.
- If $FirstPeriod$ is NULL then $FirstPeriod = 1$.
- **ODDFRATE** uses the same conventions for the sign of the inputs and the results as Excel and Google spreadsheets; generally Pmt and FV should have the same sign and PV will have the opposite sign.

See Also

- CUMODDFIPMT - Cumulative interest on the periodic annuity payments between a start period and an end period
- CUMODDFPPMT - Cumulative principal 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 - 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
- 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