

PVGA

Updated: 31 Mar 2016

Use **PVGA** to return the present value of a growing annuity.

Syntax

```
Public Shared Function PVGA(  
    ByVal Pmt As Double,  
    ByVal Pgr As Double,  
    ByVal Nper As Double,  
    ByVal Rate As Double,  
    ByVal Pay_type As Integer,)
```

Arguments

Pmt

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

Pgr

the periodic growth rate. *Pgr* 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**.

Rate

the periodic rate of return, expressed in decimal terms, that the annuity is expected earn. *Rate* 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

- If *Rate* = -1 an exception is returned
- If *Pay_type* <> 0 it is assumed to be 1
- *Nper* must be greater than zero

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
- 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
- RATE - Interest rate of an annuity