FVGA

Updated: 31 Mar 2016

Use FVGA to calculate the future value of a growing annuity.

Syntax

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

Arguments

Pmt

> the amount of the annuity payment in the first period. *Pmt* is an expression that returns a **Double**, or of a type that can be implicitly converted to **Double**.

Pgr

> the periodic growth rate of the annuity. This is the percentage amount, expressed as a decimal, by which the annuity will increase in each period. *Pgr* 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 **Double**, or of a type that can be implicitly converted to **Double**.

Rate

> the percentage rate of return, expressed as a decimal, that you expect the annuity to earn over the number of periods. The annuity payments are compounded using this value. *Rate* is an expression that returns a **Double**, or of a type that can be implicitly converted to **Double**.

Pay_type

> the number 0 or 1 and indicates when payments are due. *Pay_type* is an expression that returns a **Integer**, or of a type that can be implicitly converted to **Integer**.

Set *Pay_type* equal to	If payments are due
0	At the end of a period
1	At the beginning of a period

Return Type

Double

Remarks

- The FVGA value will have the same sign as *Pmt*.
- If the *Pay_type* is not equal to zero, it is assumed to be 1.
- If *Rate* is equal to -1 (-100%), FVGA will fall over with a divide by zero.
- To calculate the present value of a growing annuity, use the PVGA function.

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
- 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