

# RECEIVED

Updated: 31 Mar 2016

Use **RECEIVED** to calculate the amount received at maturity for a fully invested security using the following formula:

$$RECEIVED = \frac{Investment}{1 - \left(Discount \times \frac{DSM}{B}\right)}$$

Where

- B = the number of days in a year
- DSM = the number of days from settlement to maturity.

## Syntax

```
Public Shared Function RECEIVED(  
    ByVal Settlement As Date,  
    ByVal Maturity As Date,  
    ByVal Investment As Double,  
    ByVal Discount As Double,  
    ByVal Basis As String,)
```

## Arguments

### Settlement

the settlement date of the security. *Settlement* is an expression that returns a **Date**, or of a type that can be implicitly converted to **Date**.

### Maturity

the maturity date of the security. *Maturity* is an expression that returns a **Date**, or of a type that can be implicitly converted to **Date**.

### Investment

the amount invested in the security. *Investment* is an expression that returns a **Double**, or of a type that can be implicitly converted to **Double**.

### Discount

the security's discount rate. *Discount* is an expression that returns a **Double**, or of a type that can be implicitly converted to **Double**.

### Basis

the type of day count to use. *Basis* is an expression of the character string data type category.

Basis	Day count basis
0 or omitted	US (NASD) 30/360
1	Actual/Actual

2	Actual/360
3	Actual/365
4	European 30/360

*Basis* is an expression that returns a **String**, or of a type that can be implicitly converted to **String**.

## Return Type

Double

## Remarks

- If *Investment*  $\leq 0$  or *Discount*  $\leq 0$  an error is returned.
- If *Settlement*  $\geq$  *Maturity* an error is returned.
- If *Basis*  $< 0$  or *Basis*  $> 4$  an error is returned

## See Also

- BONDCF - Cash flows for a bond paying regular periodic interest
- DIRTYPRICE - Dirty price of a bond
- DIRTYIELD - Yield of a bond from the dirty price
- DIS - Price, discount rate, and/or yield of a discount security
- DISC - Discount rate
- DISFACTORS - Factors for the price calculation of a discount security
- IAM - Price and/or yield of a security paying interest at maturity
- IAMFACTORS - Factors for the price calculation of a security paying interest at maturity
- ODDFPRICE - Price of a bond with an odd first coupon
- ODDFYIELD - Yield of a bond with an odd first coupon
- ODDLPRICE - Price of a bond with an odd last coupon
- ODDLyield - Yield of a bond with an odd last coupon
- OFC - Calculate the price and/or yield of a bond with an odd first coupon using the ODDFPRICE equation
- OFCFACTORS - Returns the components of the ODDFPRICE equation
- OFL - Calculate the price and/or yield of a bond with an odd first and an odd last coupon using the OFLPRICE equation
- OFLFACTORS - Returns the components of the OFLPRICE equation
- OFLPRICE - Calculate the price of a security with an odd first and odd last period
- OFLYIELD - Calculate the yield of a security with an odd first and odd last period
- OLC - Calculate the price and/or yield of a bond with an odd last coupon using the ODDLPRICE equation
- OLCFACTORS - Returns the components of the ODDLPRICE equation
- PRICE - Price of a security paying regular periodic interest
- PRICEACT - Price of a bond where coupon amounts are based on number of days in the coupon period

- PRICEACTV - Cash flows and discount factors for a bond where coupon amounts are based on number of days in the coupon period
- PRICEDISC - Price of a discounted security
- PRICEFR - Price of a bond with forced redemptions
- PRICEMAT - Price of an interest-at-maturity security
- PRICESTEP - Price of a security with step-up rates
- RPI - Calculate the price and/or yield of a bond with regular periodic coupons
- RPIFACTORS - Factors for the calculation of the price of a bond that pays regular periodic interest
- TBILLEQ - Bond equivalent yield of a Treasury Bill
- TBILLPRICE - Price of a Treasury Bill
- TBILLYIELD - Yield of a Treasury Bill
- YIELD - Yield of a bond paying regular periodic interest
- YIELDACT - Yield of a bond where coupon amounts are based on number of days in the coupon period
- YELDDISC - Yield on a discount security
- YELDFR - Yield of a bond with forced redemptions
- YELDMAT - Yield on an interest-at-maturity security
- YIELDSTEP - Yield of a security with step-up rates