

Interest Conversion Worksheet

1)	Per Cont	C/Y 4.00	Nominal 6.70%	Effective 6.87%
2)	Per Cont	C/Y 12.00	Nominal 6.65%	Effective 6.86%
3)	Per Cont	C/Y 12.00	Nominal 6.65%	Effective 6.88%

The Interest Conversion worksheet allows you to convert between nominal and effective interest rates using either Periodic or Continuous compounding.

For convenience, the worksheet allows to analyze and calculate three interest rate in the same view. This is specially useful for quickly comparing different interest rates with different conditions.

All three interest conversions use the following equations:

$$\text{(Periodic)} \quad \%EFF = 100 \cdot [(1 + \%NOM \div C/Y \div 100)^{C/Y} - 1]$$

$$\text{(Continuous)} \quad \%EFF = 100 \cdot (e^{\%NOM / 100} - 1)$$

Interest Conversion Actions	
[Cont] [Per]	Set the interest conversion mode; Continuous Compounding or Periodic compounding for each interest conversion.
[C / Y]	Stores the number of compounding periods per year in the "Periodic" interest conversion mode.
[Nominal]	Stores or calculates the Annual Nominal interest rate as % for the corresponding conversion.
[Effective]	Stores or calculates the Annual Effective interest rate as % for the corresponding conversion.
If any other key is pressed before one of the Blue keys, the displayed number is stored in the corresponding variable. Otherwise, the variable is calculated.	

Example: Saving Accounts Comparison

You have offers to open a saving account from three banks:

- Bank #1 offers a 6.70% annual interest compounded quarterly.
- Bank #2 offers a 6.65% annual interest compounded monthly and
- Bank #3 offers a 6.65% annual interest compounded continuously.

What is the best?.

Solution: Follow the next sequence:

Keystrokes	Description
Bank #1 [Per]	Sets the Periodic mode for Bank #1
4 [C / Y]	Stores the number of periods per year of Bank #1. C/Y = 4
6.7 [Nominal]	Stores the nominal interest of Bank #1. Nominal = 6.70%
[Effective]	Calculates Bank #1 effective rate. Effective = 6.87%
Bank #2 [Per]	Sets the Periodic mode for Bank #2
12 [C / Y]	Stores the number of periods per year of Bank #2. C/Y = 12
6.65 [Nominal]	Stores the nominal interest of Bank #2. Nominal = 6.65%
[Effective]	Calculates Bank #2 effective rate. Effective = 6.86%
Bank #3 [Cont]	Sets the Periodic mode for Bank #3
6.65 [Nominal]	Stores the nominal interest of Bank #3. Nominal = 6.65%
[Effective]	Calculates Bank #3 effective rate. Effective = 6.88%
Answer: Bank #3 is offering the most favorable interest rate of 6.88%	