

Problems with calculating the proper compounding

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Hello,

I'm creating a spreadsheet that automatically determines the payment amount for a mortgage.

The problem that I'm running into is that when the compounding for the interest rate is different from that of the payment frequency, I'm not calculating the equivalent rate correctly.

For example:

J12 = 5.75%
 Monthly payments
 Amortization = 40
 n = 40 * 12 = 480

PV
 PMT = ~~~~~~
 $1 - (1 + (J1/12)) ^ (-n)$
 ~~~~~~  
 (J1/12)

^ = exponent

I do that, and then I input J1 instead of J12.

It calculates it very closely, but I know that I'm doing something wrong.

Can someone please tell me?

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