## Accrual Methods (W5)

<u>This version is superseded. Click here to view the latest guide.</u>

### **PURPOSE**

This document shows accrual methods and their definition.

### FREQUENTLY ASKED QUESTIONS

### FAQ01. What are accrual methods?

The following examples show different types of accrual methods and how system computes the interest.

### A. Act/365 (Fixed)

Principal	Rate	Start Date	End Date	Days	Day Count	Interest Amt
1,000,000.00	5%	30-Nov-07	30-Jun-08	213	365	29,178.08

### B. Act/360

Principal	Rate	Start Date	End Date	Days	Day Count	Interest Amt
1,000,000.00	5%	30-Nov-07	30-Jun-08	213	360	29,583.33

# C. Act/365 (Actual) — CASE 1 (Start and end in the same year)

Principal	Rate	Start Date	End Date	Days	Day Count	Interest Amt
1,000,000.00	5%	15-Jan-08	30-Jun-08	167	366	22,814.21

# D. Act/365 (Actual) - CASE 1 (Start and end in different years)

Γ	Principal	Rate	Start Date	End Date	Days	Day Count	Interest Amt
r	1,000,000.00	5%	1-Jan-04	31-Dec-04	365	366	49,863.388
ľ	1,000,000.00	5%	1-Jan-05	31-Jan-05	30	365	4,109.589
		•				Total	53,972.977
						Total (Rounded)	53 972 98

E. Act/365 (Actual) — CASE 1 (Start and end in different years — span more than one year)

If the contract spans more than one year (i.e., 2004 to 2006) then for each complete calendar year, the amount of interest will be simply Principal \* Interest Rate. The sub period at the start and end will be added as above.

Principal	Rate	Start Date	End Date	Days	Day Count	Interest Amt
1,000,000.00	5%	1-Jan-04	31-Dec-04	365	366	49,863.388
1,000,000.00	5%	1-Jan-05	31-Dec-05	365	365	50,000.000
1,000,000.00	5%	1-Jan-06	31-Jan-06	30	365	4,109.589
					Total	103,972.977
					Total (Rounded)	103,972.98

### F. 30/360

The formulae used by CS Lucas for 30/360 day count are as followsThe formulae used by CS Lucas for 30/360 day count are as follows

### $DAYS = f(DT_2) - f(DT_1)$ f(DT) = 360 (yyyy) + 30mm + zfor $f(DT_1)$ if $dd_1 = 31$ then z = 30if $dd_1 \neq 31$ then $z = dd_1$

for  $f(DT_2)$ if  $dd_2 = 31$  and  $dd_1 = 30$  or 31 then z = 30if  $dd_2 = 31$  and  $dd_1 < 30$  then  $z = dd_2$ 

if  $dd_2 < 31$  then  $z = dd_2$ 

30/360 Day Basis

Source: hp 12c financial calculator

Example given:

#### 31 Mar 2005 to 31 Mar 2006

	A	В	С	D = (360 * A) + (30 * B) + C
	<u>Year</u>	Month	<u>Adjustment</u>	<b>Days Computation</b>
From Date	2005	3	30 [1]	721,920.00
To Date	2006	3	30 [2]	722,280.00
				360.00

### FAQ02. How are monthly interest accruals calculated?

The total interest is calculated based on the elected accrual approach, then apportioned over the loan term based on the actual number of days in each month. It is not apportioned on a straight-line basis.

This means your monthly interest accruals will vary depending on the calendar days in each period. For example, February with 28 days will generate lower interest expense than March with 31 days, reflecting how interest actually accumulates daily on your loan.

### FAQ03. Why actual days instead of equal monthly amounts?

The system is designed to use actual days because it provides more accurate financial reporting and aligns with how interest accumulates on your loan. Rather than artificially smoothing the expense, it gives you a precise picture of when interest is actually being incurred.

#### **CHANGE HISTORY**

Date	Ву	Changes			
15-Feb-2008	-	Created.			
28-Jul-2015	CS	Included section for FAQ.			
18-Feb-2016	Clarissa	Rewritten. Reformatted.			
7-Jun-2016	Richard	Proofread.			
20-Jun-2017	TS	Added 30/360.			