DATE FUNCTIONS- DATE/DATEDIF/NETWORKDAYS/TODAY/WEEKDAY/WORKDAY/YEARFRAC

DATE

WHY YOU NEED TO KNOW THIS?

- Many a times there is a need to write the date in standard format

WHAT DOES IT DO?

- This function creates a real date by using three normal numbers typed into separate cells

SYNTAX

- =DATE(year,month,day)
- The result will normally be displayed in the dd/mm/yy format
- By using the Format,Cells,Number,Date command the format can be changed

EXAMPLE

	C	D	E	F	G
3	Day	Month	Year	Date	
4	13	12	7	12/13/07	=DATE(E4,D4,C4)
5	14	12	8	14-Dec-08	=DATE(E5,D5,C5)
6	20	12	97	December 20, 1997	=DATE(E6,D6,C6)

DATEDIF

WHY YOU NEED TO KNOW THIS?

- When you need to know the exact difference between two dates in days, months or years

WHAT DOES IT DO?

- This function calculates the difference between two dates
- It can show the result in weeks, months or years

SYNTAX

- =DATEDIF(FirstDate,SecondDate,"Interval")
- FirstDate : This is the earliest of the two dates
- SecondDate : This is the most recent of the two dates
- "Interval" : This indicates what you want to calculate
  - "d": Days between the two dates
  - "m": Months between the two dates
  - "y": Years between the two dates
  - "yd": Days between the dates, as if the dates were in the same year
  - "ym": Months between the dates, as if the dates were in the same year
  - "md": Days between the two dates, as if the dates were in the same month and year

EXAMPLE

	C	D	E	F	G	H
3	FirstDate	SecondDate	Interval	Difference		
4	1-Jan-06	10-May-07	days	494	=DATEDIF(C4,D4,"d")	
5	1-Jan-06	10-May-07	months	16	=DATEDIF(C5,D5,"m")	
6	1-Jan-06	10-May-07	years	1	=DATEDIF(C6,D6,"y")	
7	1-Jan-06	10-May-07	yeardays	129	=DATEDIF(C7,D7,"yd")	
8	1-Jan-06	10-May-07	yearmonths	4	=DATEDIF(C8,D8,"ym")	
9	1-Jan-06	10-May-07	monthdays	9	=DATEDIF(C9,D9,"md")	

NETWORKDAYS

WHY YOU NEED TO KNOW THIS?

- When you need to know the number of working days between two given days
- Stock market is closed on public holidays and hence, used for calculation of active days

WHAT DOES IT DO?

- This function will calculate the number of working days between two dates
- It will exclude weekends and any holidays

SYNTAX

- =NETWORKDAYS(StartDate,EndDate,Holidays)
- Holidays: This is a list of dates which will be excluded from the calculation, such as Xmas and Bank holidays

EXAMPLE

	B	C	D	E	F
27	Start Date	End Date	Work Days		
28	Tue 02-Mar-04	Thu 06-Mar-08	1044	=NETWORKDAYS(B28,C28,C33:C37)	
29	Tue 02-Mar-04	Thu 13-Mar-08	1049	=NETWORKDAYS(B29,C29,C33:C37)	
30	Fri 27-Apr-07	Tue 01-May-07	2	=NETWORKDAYS(B30,C30,C33:C37)	
31					
32		Holidays			
33	Bank Holiday	1-May-07			
34	Xmas	25-Dec-07			
35	New Year	1-Jan-07			
36	New Year	1-Jan-08			

TODAY

WHY YOU NEED TO KNOW THIS?

- When you need to do valuations as of the most current date, this function becomes very helpful

WHAT DOES IT DO?

- Use this to show the current date

SYNTAX

- =TODAY()

- The result will normally be displayed using the DD-MMM-YY format

EXAMPLE

	C	D
3	Today Is	
4	28-Apr-08	=TODAY()

	C	D	E
19	Date	Days Since	
20	1-Jan-97	4135	=TODAY()-C20
21	10-Aug-97	3914	=TODAY()-C21

WEEKDAY

WHY YOU NEED TO KNOW THIS?

- To check if the day is market holiday (Saturday or Sunday)

WHAT DOES IT DO?

- This function shows the day of the week from a date

SYNTAX

- =WEEKDAY(Date,Type)
- Type: This is used to indicate the week day numbering system
  - o 1 : will set Sunday as 1 through to Saturday as 7
  - o 2 : will set Monday as 1 through to Sunday as 7
  - o 3 : will set Monday as 0 through to Sunday as 6
  - o If no number is specified, Excel will use 1

EXAMPLE

	C	D	E
3	Date	Weekday	
4	Thu 01-Jan-98	5	=WEEKDAY(C4)
5	Thu 01-Jan-98	5	=WEEKDAY(C5)
6	Thu 01-Jan-98	5	=WEEKDAY(C6,1)
7	Thu 01-Jan-98	4	=WEEKDAY(C7,2)
8	Thu 01-Jan-98	3	=WEEKDAY(C8,3)

WORKDAY

WHY YOU NEED TO KNOW THIS?

- Used for calculating project completion date / invoice date

WHAT DOES IT DO?

- Use this function to calculate a past or future date based on a starting date and a specified number of days

- The function excludes weekends and holidays

SYNTAX

- =WORKDAY(StartDate,Days,Holidays)
- The result will normally be shown as a number which can be formatted to a normal date by using Format, Cells, Number or Date

EXAMPLE

	D	E	F	G	H
23	Order Date	Delivery Days	Delivery Date		
24	Fri 02-Feb-07	2	Tue 06-Feb-07	=WORKDAY(D25,E25,D28:D32)	
25	Mon 17-Dec-07	28	Mon 28-Jan-08	=WORKDAY(D25,E25,D28:D32)	
26					
27	Holidays				
28	Tue 01-May-07	Bank Holiday			
29	Tue 25-Dec-07	Xmas			
30	Tue 01-Jan-08	New Year			

YEARFRAC

WHY YOU NEED TO KNOW THIS?

- Used for calculation of the time period between two dates (calculating Net Present Value or IRR)

WHAT DOES IT DO?

- This function calculates the difference between two dates and expresses the result as a decimal fraction

SYNTAX

- =YEARFRAC(StartDate,EndData,Basis)
- Basis : Defines the calendar system to be used in the function
  - o 0 : or omitted US style 30 days per month divided by 360
  - o 1 : 29 or 30 or 31 days per month divided by 365
  - o 2 : 29 or 30 or 31 days per month divided by 360
  - o 3 : 29 or 30 0r 31 days per month divided by 365
  - o 4 : European 29 or 30 or 31 days divided by 360

EXAMPLE

	C	D	E	F
3	Start Date	End Date	Fraction	
4	1-Jan-98	1-Apr-98	0.25	=YEARFRAC(C4,D4)
5	1-Jan-98	31-Dec-98	1	=YEARFRAC(C5,D5)
6	1-Jan-98	1-Apr-98	25%	=YEARFRAC(C6,D6)