

## Lesson 2 Date Function in Excel

### Date Worksheet Functions.

**Date-** Return the sequential serial number that represents a particular date.

**Syntax:** *Date (year, month, day )*

**Year** – The value of the year argument can include one to four digits.

**Month** – A position or negative interger representing the month of the year from 1 to 12. If month is greater than 12 month adds that number of months to the first month in the year specified.

**Day** – A position or negative integer representing the day of the month from 1 to 31.

| Equation            | Result     | Notes                                                          |
|---------------------|------------|----------------------------------------------------------------|
| =DATE(2009, 3, 15)  | 03/15/2009 |                                                                |
| =DATE(5, 10, 15)    | 10/15/1905 | Notice this counts year from 1900, thus will not assume "2005" |
| =DATE(2010, 15, 20) | 03/20/2011 | Notice this is going into the following year because 15 months |
| =DATE(1976, 11, 35) | 12/5/1976  | Notice this is going into the following month because 35 days  |
| =DATE(2007, -1, 5)  | 11/05/2006 | Negative values will go backwards in time, minus day/year      |

**DATEVALUE** – Returns the serial number of a date.

Converts a date that is stored as text to a serial number that *Excel* recognises as a date. To view a date serial member as a date, you must apply a data format to the cell.

**Syntax:** DATEVALUE (date \_text)

date \_text represents a date between /01/1900 AND 12/31/9999 saved as text.

| Equation                 | Result  | Notes                   |
|--------------------------|---------|-------------------------|
| =DATEVALUE(3/15/2009)    | #VALUE! | Date not in Text format |
| =DATEVALUE("10/15/1905") | 2115    |                         |
| =DATEVALUE("3/20/2011")  | 40622   |                         |
| =DATEVALUE(A1)           | #VALUE! | A1 = 12/5/1976          |
| =DATEVALUE(A1)           | 28099   | A1 = "12/5/1976"        |

**DAYS360** – returns the number of days between two dates based on a 360 day year.

360 day year assumes twelve 30 day months, this is often used with accounting calculations. If start\_date occurs after end\_date, the DAYS360 function returns a negative number.

**Syntax** – DAYS360 (start\_date,end\_date,(method))

*Start Date* and *End Date* are valid dates, which represents the starting and ending dates.  
*Method* Optional logical value that specifies whether to use the **U.S. (NASD)** or **European** **method** in the calculation. *False* or omitted will give us the **U.S method**. True will use the **European** method.

**Remarks:** If start \_ date is the last day of the month, both methods set the start \_date to the 30<sup>th</sup> of the month, but if the end \_date is the last day of the month the U.S method will change the date to the 1<sup>st</sup> of the next month, the European will change the date to the 30<sup>th</sup>.

| Equation         | Result | Notes                            |
|------------------|--------|----------------------------------|
| =DAYS360(A1, A2) | 8      | A1 = 02/27/2009, A2 = 03/05/2009 |
| =DAYS360(B1, B2) | 1      | B1 = 01/30/2009, B2 = 02/01/2009 |
| =DAYS360(C1, C2) | 1      | C1 = 01/31/2009, C2 = 02/01/2009 |
| =DAYS360(D1, D2) | 360    | D1 = 11/15/2009, D2 = 11/15/2010 |

**EDATE** – Returns serial number of the date that is a number of months away from a date.

**Syntax** EDATE (start\_date, months)

**Start Date** is a value date that represents the starting date.

**Months** in the number of months before or after **start\_date**. A **positive** value for months yields a **future date**, a **negative** value yields a **past date**.

| Equation        | Result |            | Notes           |
|-----------------|--------|------------|-----------------|
| =EDATE(A1, 1)   | 39899  | 03/27/2009 | A1 = 02/27/2009 |
| =EDATE(A1, 10)  | 40174  | 12/27/2009 | A1 = 02/27/2009 |
| =EDATE(A1, 100) | 42913  | 06/27/2017 | A1 = 02/27/2009 |
| =EDATE(A1, -1)  | 39840  | 01/27/2009 | A1 = 02/27/2009 |

**EOMONTH** – Returns serial number for the last day of the month.

*EOMonth =>End of month.*

**Syntax:** EOMONTH(start\_date, month)

**Start Date** is a valid date that represents the starting *date*.

**Months** number of months before or after **start\_date**. A **positive** value for months yields a **future date**; a **negative** value yields a **past date**.

| Equation          | Result |            | Notes           |
|-------------------|--------|------------|-----------------|
| =EOMONTH(A1, 1)   | 39903  | 03/31/2009 | A1 = 02/27/2009 |
| =EOMONTH(A1, 10)  | 40178  | 12/31/2009 | A1 = 02/27/2009 |
| =EOMONTH(A1, 100) | 42916  | 06/30/2017 | A1 = 02/27/2009 |
| =EOMONTH(A1, -1)  | 39844  | 01/31/2009 | A1 = 02/27/2009 |

**MONTH**- Returns the numeric value of the month in a valid date.

**Syntax** -= MONTH (serial number).

*Serial Number* is the date of the month you are trying to find.

| Equation             | Result | Notes                   |
|----------------------|--------|-------------------------|
| =MONTH("10/15/1905") | 10     |                         |
| =MONTH(40622)        | 3      | Equivalent to 3/20/2011 |
| =MONTH(A1)           | 12     | A1 = 12/5/1976          |

**TODAY**- the serial number of the current date.

**Syntax** : TODAY()

| Equation  | Result    | Notes                                 |
|-----------|-----------|---------------------------------------|
| =TODAY( ) | 12/5/2016 | This will always be the current date. |

## Questions

1. Give the meaning of day,Year,Syntax and month in Date Worksheet.

2. Explain EOMONTH mean?

**3. Explain DATEVALUE, DAYS360 ,EOMONTH, and TODAY.**

**4. Explain EDATE**