

# Calendar Functions

The HP-12C calculator provides two calendar functions to perform date-related calculations, the **[g] [DATE]** and **[g] [ADYS]** commands. For each of them, dates may be in either of two formats: Month-Day-Year (M.DY) or Day-Month-Year (D.MY).

## **Month-Day-Year:**

To set the M.DY format press **[g] [M.DY]**.

To enter a date in this format:

- 1) Type one or two digits of the month, (1 to 12).
- 2) Press the decimal point key,  .
- 3) Type two digits for the day, (01 to 31).
- 4) Type the four digits of the year.

For example, to enter the date July 21, 2013, type **7.212013**

## **Day-Month-Year:**

To set the D.MY format press **[g] [D.MY]**. When this format is in effect, **D.MY** will appear in the bottom row of the display.

To enter a date in this format:

- 1) Type one or two digits of the day, (1 to 31).
- 2) Press the decimal point key,  .
- 3) Type two digits for the month, (01 to 12).
- 4) Type the four digits of the year.

For example, to enter the date July 21, 2013, type **21.072013**

## Calendar Function [g] [DATE]

This function key calculates a new date adding the number of days in the stack-X to the date entered in the stack-Y.

The resulting new date in stack-X is displayed using the date format in effect and showing in the right most digit the code for the day of the week (1 for Monday through 7 for Sunday).

### **Example:** [g] [DATE]

What date was 1000 days ago if today is December 29, 2011?

#### **(in M.DY mode)**

Keystrokes	Description
[g] [M.DY]	Set Month-Day-Year format.
Type "12.292011" [ENTER]	Type the date and press "ENTER".
Type "1000" [CHS]	Type the Number of Days and change its sign (negative value because is 1000 days back).
[g] [DATE]	Calculates the new date displaying "04,03,2009 5" which stands for <b>Friday, April 3, 2009</b> .

#### **(in D.MY mode)**

Keystrokes	Description
[g] [M.DY]	Set Day-Month-Year format.
Type "12.292011" [ENTER]	Type the date and press "ENTER".
Type "1000" [CHS]	Type the Number of Days and change its sign (negative value because is 1000 days ago).
[g] [DATE]	Calculates the new date displaying "04,03,2009 5" which stands for <b>Friday, April 3, 2009</b> .

## Calendar Function [g] [ΔDYS]

This function key calculates the number of days from a date value in stack-Y to a date value in stack-X. The calculation is performed simultaneously in the actual and 30/360 calendars.

### **Example:** [g] [ΔDYS]

What is the number of days elapsed since December 31, 1999 if today is June 23, 2012?

#### **(in M.DY mode)**

Keystrokes	Description
[g] [M.DY]	Set Month-Day-Year format.
Type "12.311999" [ENTER]	Type the initial date and press "ENTER".
Type "6.232012"	Type the end date.
[g] [ΔDYS]	Calculates the number of days between the two dates using the actual calendar. <b>Result = 4,558</b>
[X⇌Y]	Shows the number of days between the two dates using 30/360 days calendar. <b>Result = 4,493</b>

#### **(in D.MY mode)**

Keystrokes	Description
[g] [D.MY]	Set Day-Month-Year format.
Type "31.121999" [ENTER]	Type the initial date and press "ENTER".
Type "23.062012"	Type the end date.
[g] [ΔDYS]	Calculates the number of days between the two dates using the actual calendar. <b>Result = 4,558</b>
[X⇌Y]	Shows the number of days between the two dates using 30/360 days calendar. <b>Result = 4,493</b>