

Excel DAVERAGE Function

Function Wizard button

Using DAVERGE to find average values in a database

Maple Tree	Age	Diameter	Taps	Production
Black	65	12	1	15
Silver	35	18	1	12
Sugar	75	15	1	18
Black	115	22	2	32
Silver	70	28	2	20
Sugar	125	25	2	35
Black	160	33	3	40
Silver	90	38	3	33
Sugar	175	35	3	45

Average Age: 133

DAVERAGE Function Overview

The DAVVERAGE function is one of Excel's database functions.

This group of functions is designed to make it easy to summarize information from large tables of data.

They do this by returning specific information based on one or more criteria chosen by the user.

The DAVVERAGE function can be used to find the average value for data that matches the set criteria.

DAVERAGE Syntax and Arguments

The syntax for the DAVVERAGE function is:
= DAVVERAGE (database, field, criteria)

All database functions have the same three arguments:

Database: (required) Specifies the range of cell references containing the database. The field names must be included in the range.

Field: (required) Indicates which column or field is to be used by the function in its calculations. Enter the argument either by typing the field name in quotes - such as "Radius" - or enter the column number - such as 3.

Criteria: (required) Lists the range of cells containing the conditions specified by the user. The range must include at least one field name from the database and at least one other cell reference indicating the condition to be evaluated by the function.

Example Using Excel's DAVVERAGE Function - Matching a Single Criterion

This example will use *DAVERAGE* to find the average age of trees as listed under the *Age* column.

The criterion used to filter the data in this example will be the amount of sap produced per season.

We will find the average age of trees that product 30 or more gallons of sap per season.

Entering the Tutorial Data

Note: The tutorial does not include formatting steps.

1. Download Database Function Workbook file from moodle
2. Click the DAVVERAGE worksheet tab

Selecting the Criterion

To get DAVVERAGE to only look at data for trees that produce 30 or more gallons of sap per season we will enter the criterion **>=30** under the *Production* field name in row 14.

1. In cell E14 type the criterion **>=30**
2. In cell A16 type the heading *Average Age*: to indicate the information we will be finding with DAVVERAGE

Naming the Database

Note If you have named and saved the database while completing another of the database function tutorials that use this same data you do not need to complete this step.

Using a named range for large ranges of data such as a database can not only make it easier to enter this argument into the function, but it can also prevent errors caused by selecting the wrong range.

Named ranges are very useful if you use the same range of cells frequently in calculations or when creating charts or graphs.

1. Highlight cells A2 to E11 in the worksheet to select the range
2. Click on the name box above column A in the worksheet
3. Type *Trees* into the name box to create the named range
4. Press the *Enter* key on the keyboard to complete the entry

Opening the DAVERAGE Dialog Box

A function's dialog box provides an easy method for entering data for each of the function's arguments.

Opening the dialog box for the database group of functions is done by clicking on the function wizard button (fx) located next to the formula bar above the worksheet - see image above.

1. Click on cell B16 - the location where the results of the function will be displayed
2. Click on the *function wizard button (fx)* icon to bring up the *Insert Function* dialog box
3. Type *DAVERAGE* in the *Search for a function* window at the top of the dialog box
4. Click on the *GO* button to search for the function
5. The dialog box should find *DAVERAGE* and list it in the *Select a function* window
6. Click OK to open the *DAVERAGE* function dialog box

Completing the Arguments

1. Click on the *Database* line of the dialog box
2. Type the range name *Trees* into the line
3. Click on the *Field* line of the dialog box
4. Type the field name *"Age"* into the line - be sure to include the quotation marks
5. Click on the *Criteria* line of the dialog box
6. Highlight cells A13 to E14 in the worksheet to enter the range
7. Click OK to close the *DAVERAGE* function dialog box and complete the function
8. The answer **133** - indicating the average age of trees that produce 30 or more gallons of sap - should appear in cell B16

Note: If we wanted to find the average age for all trees, we could use the regular *AVERAGE* function, since we do not need to specify criteria to limit what data is used by the function.

Database Function Errors

#Value: Occurs most often when the field names were not included in the database argument.

For the example above, be sure that the field names in cells A2:E2 were included in the named range *Trees*.