## **Contents for Berlin's Cheat Sheet**

Berlin's Cheat Sheet is a library of mathematical based problems. A productivity saver for solving common and uncommon equations.

To learn how to use Help, press F1.

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## **Sheet Commands**

## **Sheet sub menu Commands**

Opens the sub menu of cheat sheets for that particular topic. (Conversion, Finance, Machining, Math/Trig)

See Also Open New Cheat Sheet

## **Print Current Sheet**

Prints the current cheat sheet that is in focus.

## **Printer Setup**

Allows the selection of different installed printers and/or the selections for that particular printer.

### Exit

Quits Berlin's Cheat Sheet.

## **Window Commands**

### Tile

Arrange open windows side by side so that all of them are visible.

See Also Arranging Windows

### Cascade

Arranges open windows so that the title bar of each window is visible.

See Also Arranging Windows

## **Arrange Icons**

Arranges into a row all cheat sheet icons.

See Also Arranging Windows

### Close All

Closes all cheat sheets that are running.

See Also <u>Arranging Windows</u>

## **Option Commands**

### **Field Reset**

Clears the field (input box) that is in focused.

Double clicking a input box with the mouse is the quickest way to reset a field.

See Also

Reset a Field, a Sheet or Globally

#### **Sheet Reset**

Clears the focused cheat sheet to the starting values.

All fields that do not have a default will be reset to **null** value while the other fields will be resetted to the default value.

See Also

Reset a Field, a Sheet or Globally

### **Global Reset**

Clears and resets all cheat sheets to the starting values.

See Also

Reset a Field, a Sheet or Globally

#### Format

Allows display formats of numbers which includes setting the parameters for the number of decimals, adding comma's and exponential formats.

See Also

Format a Field, Sheet or Globally

## **Only Input Fields**

See Also

Tab to "Input Fields" Only

### What is Berlin's Cheat Sheet

**Berlin's Cheat Sheet** is a mathematical based program but so unlike others. This program is a productivity tool that almost anyone can benefit from. The idea behind the program is that most of us need to look up a formula or two to solve some type of equation or problem. In most cases, we really do not have a desire to know the formula, what we really want is the **answer** to our problem. This is where the **Cheat Sheet** comes into play. It is a library of common (and uncommon) types of problems, which are call sheets. In other words, a sheet is a graphical representation of a problem that appears on the screen. It allows the user to enter what he/she knows while the program calculates all the unknown values.

A good example of this is the **90 degree triangle sheet**. A 90 degree triangle will appear on the screen with input boxes at all sides and angles, plus an area and perimeter input box. Input one angle, the opposite angle will be calculated. The remaining problem is solved after one of the sides is entered. Once someone defines a certain type of problem, adding it to **Berlin's Cheat Sheet** is extremely quick. The idea is to have a totally complete library of all types of mathematical problems. It can be useful in all fields (Accounting, Electronics, Math, Finance, Physics, Manufacturing, Mechanics, Schoolwork, Hobbies, etc.).

## **Disclaimer of Warranty**

This software and manual are "as is" and without warranties as to performance or merchantability. This program is without any express or implied warranties whatsoever. The user is advised to test the program thoroughly before relying on it. In no event shall Berlin Software be liable for any loss of profit or any other commercial damage, including but not limited to special, incidental, consequential or other damages.

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Enclose information about any other cheat sheet you might want.

(Mail Order, BBS, Friend)

## **Main Menu**

After loading and executing Berlin's Cheat Sheet a blank screen will appear with four options:  $\underline{S}$ heets,  $\underline{W}$ indow,  $\underline{O}$ ptions and  $\underline{H}$ elp. All options include a sub menu under each. Go to the  $\underline{S}$ heets option to initialize a new sheet (problem), printing the current sheet, and exiting the program.

The <u>Window</u> sub menu allows standard window features such as arranging icons, tiling, cascading and closing all child windows. For more information about these standard features refer to the Windows User Manual.

The Options sub menu is used to manipulate the actions and screens of the individual sheets. Discussion of these features will appear later in this manual.

## **Arranging Windows**

Using commands on the Window menu, you can arrange your main window so that the cheat sheets that are open are easy to see. The Tile command arranges open cheat sheets in smaller sizes that fit on the programs main windows. The Cascade command overlaps the open cheat sheets so that each title bar is visible.

## **Opening New Cheat Sheet**

To start or open a new <u>sheet</u> select <u>Sheets</u> from the main menu. Select a main topic from the selection (example  $\underline{\mathbf{T}}$ rig/Math). The sheets that relate to that particular category will appear in the sub menu. Select the desired sheet from the list.

## Sheet

A "Sheet" is a graphical representation of a mathematical problem whereby the user can type what he/she knows allowing the program to calculate all the unknowns.

## **Entering Values into a Cheat Sheet**

A graphical representation of a problem will appear on the screen. Three different forms of *input boxes* will appear on the sheet. The **solid** box means that values can be entered or changed. A **dash** box means that the value in the box is a calculated value. This value can not be changed or edited. The last input box is the **focus** box. On the top of the sheet is the **main edit line** that will contain the value of the focus box. The focus box can be of both types: **solid** or **dash**. The solid focus box means that the value shown is allowed to be changed.

To get an input box in focus use the mouse and click on the appropriate box. If using the keyboard press the <Tab> key until the desired field is in focus. Enter a new value by typing it in the main edit box and pressing either the <Enter> key, <Tab> key or clicking the left mouse button.

## **Changing a Calculated Value**

Any value that has a solid box can be changed. However, if the value was calculated by the program or has a dash box the value may not directly be changed. This is because the input box contains the correct and only answer based on the given information.

To change a calculated value, first reset an **entered** value. This should unsolve the desired field that you wish to change. **Double clicking the field with the left mouse button is the quickest way to reset a manually entered field.** To use the keyboard to reset the field that is in focus press the <Alt><R>. Click the input box that contained the calculated value (it should be blank now). Enter the new value.

## **Use the Built in Calculator**

Most of the time you will enter simple values into the main input line. However, this is only the beginning. Enter any valid formula (problem) when a solid input field is in focus (example: **3\*4+5**). The built in calculator will do the math and enter the value **17** into the solid focus input box.

Users may also use the built in calculator strictly as a calculator versus adding numbers into a field. With the left mouse button click anywhere in a cheat sheet that is not an input box so that there is no focus input box. If using the keyboard press the <Tab> key until the focus input box disappears. When using a particular cheat sheet, without a field in focus, the main edit line works like a calculator. Enter a formula and press the <Enter> key to have the formula calculated. Displayed on the same main edit line is the result to the entered equation.

The answer will be highlighted. The main edit clears as soon as you start typing the next equation. To use the resulting answer of the problem for the first part of another problem press the <Right Arrow> key to remove the highlighter. Type in the next problem. Example: Find the sum of 56 and 23. Then double the sum.

First make sure no input box is in focus. Type:

```
56+23 <Enter>
```

The result in the main edit line will be:

79

^.5

Type:

<Right Arrow> \* 2 <Enter>

Valid functions for a formula are as follows:

```
addition
+
              subtraction
*
              multiplication
              division
              to the power
(
              left parenthesis
              closing parenthesis
Sin()
              sine
Cos()
              cosine
Tan()
              tangent
ASin()
              arc sine
ACos()
              arc cosine
ATan()
              arc tangent
Ρi
              3.14159265....
Ε
              Exponential
              Natural Log
Ln()
```

Square Root Square

## **Use the Clipboard**

When the value of the main edit line is highlighted use Window's standard feature of <Ctrl> <Insert> to copy the value to the clipboard. The <Shift> <Insert> will cut the value to the clipboard. To paste a value from the clipboard to the main edit line use <Shift> <Insert>.

Note: When a value on the main edit line is highlighted, pressing any key will overwrite this value. To restore the original value press <Alt><Backspace>.

## Format a Field, Sheet or Globally

Each field on every cheat sheet is fully formatable. It works much like many spreadsheet programs whereby a format can exist globally, for a column, for a row, or just on one particular cell. In the case of Berlin's Cheat Sheet the format can exist globally (all sheets), on a particular sheet or on an individual field. If a particular field does not have a specific format it will default to that particular cheat sheet format. If a particular cheat sheet does not have a specific format it will default to the global format.

**No. of Decimals** refers to the number of digits right of the decimal point of a particular number. There is also the option to display the number in scientific notation when the value becomes so large or small. Set **Scientific Notation 10^+:** when a number is equal or greater than the entered value and **Scientific Notation 10^-:** when a number is smaller than the entered. Scientific Notation is denoted by **E**.

Example of 1234 in scientific notation is 1.234E3 meaning 1.234 times 10 to the 3rd power. To have this value be displayed in scientific notation the field **Scientific Notation 10**^+: has to be set to **3** or lower. To eliminate all numbers to be displayed in scientific notation set the two respected fields to **99**.

**Digits before adding Comma** refers to the number of digits left of the decimal point a value must have before showing that value separated by commas every third digit. Setting this value to **4** or lower will ensure all appropriate values be displayed in the comma format.

Please note that once a format has been specified for either a sheet or field it can be erased or cleared with the **Default** button. A field format will override a sheet format that will override the global format.

## Tab to "Input Fields" Only

When **Only Input Fields** is checked pressing the <Tab> or <Enter> key will only move the focus to the solid input boxes where input is allowed. When this menu item is not checked the <Tab> key will move the focus to every input box on the cheat sheet. This is useful to view the entire value of a calculated field on the main edit line especially when it is not totally visible in the input box. When using the left mouse button, clicking any input box at any time will bring that input box into focus.

## Reset a Field, a Sheet or Globally

There is the option to clear all the cheat sheets on the screen, one particular sheet or a field (input box). When selecting the option to reset a sheet, *Berlin's Cheat Sheet* will erase all values plus add the default values to all appropriate fields. It has the same effect as starting a new cheat sheet. **As mentioned earlier, the quickest and easiest way to reset or clear a field with the mouse is to double click the left mouse button on the appropriate input box.**