

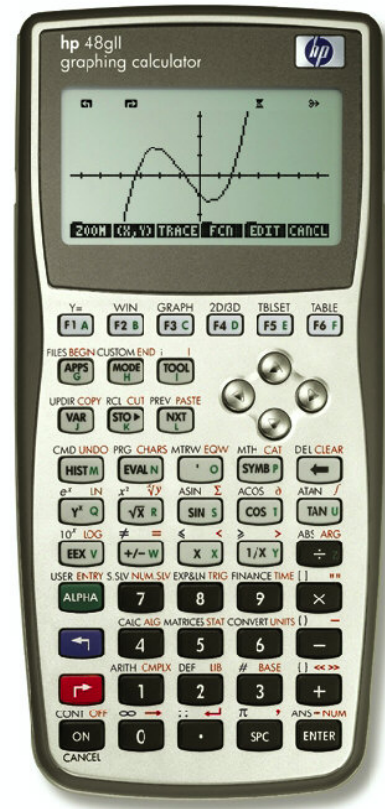


hp calculators

HP 48GII Working with units

The UNITS menu

Practice working with units



The UNITS menu

The UNITS menu is the RED shifted function of the $\boxed{6}$ key and can be accessed by pressing $\boxed{\rightarrow}$ UNITS. When pressed, a CHOOSE box is displayed with 17 different categories of units built into the 48GII.



Figure 1

The first choice Tools.. contains functions to operate on units. Choices two through six displayed above contain units in the categories of Length, Area, Volume, Time and Speed.



Figure 2

Choices seven through twelve displayed above contain units in the categories of Mass, Force, Energy, Power, Pressure and Temperature.



Figure 3

Choices thirteen through seventeen displayed above contain units in the categories of Electric Current, Angle, Light, Radiation and Viscosity.

In Algebraic mode, to enter a number with a specified unit associated, enter the number, press $\boxed{\rightarrow}$ — to attach this “underscore” character, then press $\boxed{\rightarrow}$ UNITS to choose the unit desired.

In RPN mode, to enter a number with a specified unit associated, enter the number, then press $\boxed{\rightarrow}$ UNITS to choose the unit desired. The attachment of the “underscore” is automatic.

In Algebraic mode, to convert something from one measurement unit to another, press $\boxed{\rightarrow}$ UNITS and choose TOOLS.. to display the CHOOSE box shown below. Select the first choice, CONVERT to place the CONVERT() function on the command line. Enter the units from conversion is desired, press $\boxed{\rightarrow}$ —, and enter a one associated with the units into which the conversion is desired. Press $\boxed{\text{ENTER}}$ to convert the units.

In RPN mode, to convert something from one measurement unit to another, enter the first number with the associated unit, then enter a one onto the stack and press $\boxed{\rightarrow}$ UNITS to enter this value on the stack. Press $\boxed{\rightarrow}$ UNITS and choose TOOLS.. to display the CHOOSE box shown below. Select the first choice, CONVERT, to convert the units.



Figure 4

The examples that follow illustrate some of these functions.

Practice working with units

Example 1: Convert one yard into inches.

Solution: In RPN mode,

`1` `→` `UNITS` `2` `ENTER` `4` `ENTER` `1` `→` `UNITS` `2` `ENTER` `6` `ENTER` `→` `UNITS` `ENTER` `ENTER`



Figure 5

In Algebraic mode,

`→` `UNITS` `ENTER` `ENTER` `1` `→` `—` `→` `UNITS` `2` `ENTER` `4` `ENTER` `→` `—` ;
`1` `→` `—` `→` `UNITS` `2` `ENTER` `6` `ENTER`



Figure 6

`ENTER`



Figure 7

Answer: 36 inches.

Example 2: Find the area of the rectangle that is 36 meters by 15 yards. Express the answer in square meters.

Solution: In RPN mode,

`3` `6` `→` `UNITS` `2` `ENTER` `ENTER` `1` `5` `→` `UNITS` `2` `ENTER` `4` `ENTER` `×` `→` `UNITS` `ENTER` `2` `ENTER`

```

RAD XYZ HEX R= 'X'
{HOME}
-----
4:
3:
2:
1:
493.776_m^2
EDIT VIEW STACK RCL PURGE CLEAR
    
```

Figure 5

In Algebraic mode,

UNITS

 UNITS

```

RAD XYZ HEX R= 'X'      ALG
{HOME}
-----
:36_m·15_yd
540_(m·yd)
EDIT VIEW STACK RCL PURGE CLEAR
    
```

Figure 6

UNITS ANS

```

RAD XYZ HEX R= 'X'      ALG
{HOME}
-----
:36_m·15_yd
540_(m·yd)
:UBASE(ANS(1))
493.776_m^2
EDIT VIEW STACK RCL PURGE CLEAR
    
```

Figure 7

Answer: 493.7760 square meters.