hp calculators

HP 50g Working with units

The UNITS menu

Practice working with units

HP 50g
Graphing Calculator
(7)


TRFTE

| Y= | WIN | GRAPH | 2D/BD | TBLSET | TABLE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| F1A A | F2 B | F3 C | F4 D | F5 E | F6 |

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## hp calculators

HP 50g Working with units

## The UNITS menu

The UNITS menu is the ORANGE shifted function of the 6 key and can be accessed by pressing $\rightarrow$ UNTS . When pressed, a CHOOSE box is displayed with 17 different categories of units built into the 50 g .


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.


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 $\Gamma$ _ to attach this "underscore" character, then press $\Gamma$ UnTs to choose the unit desired.

In RPN mode, to enter a number with a specified unit associated, enter the number, then press $\rightarrow$ UNTS 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 $\mapsto$ UNTs 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 $\Gamma$ $\qquad$ , and enter a one associated with the units into which the conversion is desired. Press EANER 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 $\Gamma$ UNTIS to enter this value on the stack. Press $\rightarrow$ UNTS and choose TOOLS.. to display the CHOOSE box shown below. Select the first choice, CONVERT, to convert the units.
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HP 50g Working with units

Z ZHOHE T
6: R.convesa
5: 2 U.UEASE
4: $\begin{aligned} & \text { 3. } \mathrm{UWHL} \\ & \text { 4. } \mathrm{HFACT}\end{aligned}$
2: $\begin{aligned} & 4.4 F A C T \\ & 5.4 H I T T\end{aligned}$
1: 6. Units..

The examples that follow illustrate some of these functions.

Practice working with units
Example 1: Convert one yard into inches.
Solution: In RPN mode,
$1 \rightarrow$ UNIT 2 ENTER 4 ENTER $1 \rightarrow$ UNTS 2 ENTER 6 ENTER $\rightarrow \square$ UNITS ENTER ENTER
RAD yyz EIn $\mathbf{E}=$ ' K '

In Algebraic mode,
$\rightarrow$ UNIT ENTER ENTER $1 \rightarrow-\Gamma$ UNITS 2 ENTER 4 ENTER $\rightarrow$
$1 \rightarrow-\infty$ UNTS 2 ENTER 6 ENTER


COHVERT(1_yd,1_in)

Figure 6
ENTER
 zhohes


Figure 7

Answer: $\quad 36$ 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,
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In Algebraic mode,
 $\rightarrow$ UNTS 2 ENTER 4 ENTER ENTER

R月0 xyz EIn $\mathbf{E}=$ ' K '
hlg
<HOHE $\}$
:36_m•15_yd

Figure 6
$\rightarrow$ UNIT ENTER 2 ENTER $\rightarrow$ ANS ENTER

$: 36 \_m \cdot 15$ _yd
$:$ UBRSE(ANS $(1))$
$\quad 4930$ _(mud)
$\quad 4760 \_m^{2}$

Answer: $\quad 493.7760$ square meters.

