

Percentage Calculations

The HP-12C calculator has three keys for solving percentage problems: **%**, **Δ%**, and **%T**. There is no need to convert percentages to their decimal equivalents, the calculator automatically does the conversion when you press any of these keys.

% Percent Function

The **%** key calculates the stack-X value percentage of the stack-Y value. The result in stack-X is equal to $Y \cdot X / 100$.

Example : Percent of a Number

What is 15% of 45.3?

(in RPN mode)

Keystrokes	Description
Type "45.3" [ENTER]	Type the value and press "ENTER".
Type "15" [%]	Type the percentage and press "%". Result = 6.8

(in ALG mode)

Keystrokes	Description
Type "45.3" [x]	Type the value and press multiply.
Type "15" [%]	Type the percentage and "%".
[=]	Calculates the result. Result = 6.8

Example : Discount and Tax

If you buy a new iPhone at a list price of \$550.00, and the seller offers you an 8% discount, what is the net price? Also, if the tax rate is 6%, what is the total cost including tax?

(in RPN mode)

Keystrokes	Description
Type “550” [ENTER]	Type the list price and press “ENTER”.
Type “8” [%] [-]	Type the discount and subtract it. Result = 506.00
Type “6” [%] [+]	Type the tax rate and add it. Result = 536.36

(in ALG mode)

Keystrokes	Description
Type “550” [-]	Type the list price and press minus.
Type “8” [%]	Type the discount and “%”. Result = 44.00
[=]	Calculates the result. Result = 506.00
[+] Type “6” [%]	Press plus, type the tax rate and “%”. Result = 30.36
[=]	Calculates the result. Result = 536.36

$\Delta\%$ Percent Change Function

The $\Delta\%$ key calculates the percent difference between the starting, or base, value (stack-Y) and a later, or changed, value (stack-X). The result in stack-X is equal to $100 \cdot (X - Y) / Y$.

Example : Percent Change

What is the percent change of a stock if last year it sold for \$425 and now it costs \$350 per share?

(in RPN or ALG mode)

Keystrokes	Description
Type "425" [ENTER]	Type the base value and press "ENTER".
Type "350" [$\Delta\%$]	Type the changed value and press " $\Delta\%$ ". Result= -17.65% (a negative result indicates a decrease over time)

%T Percent of Total Function

The **%T** key calculates the percentage that the stack-X value is of the stack-Y value. The result in stack-X is equal to $100 \cdot X / Y$.

Example : Percent of Total

In a company there are 1152 employees in total, 350 women, and 802 men. What percentage of the employees are female ?.

(in RPN or ALG mode)

Keystrokes	Description
Type "1152" [ENTER]	Type the total value and press "ENTER".
Type "350" [%T]	Type the number of females and press "%T". Result = 30.38% of the employees are female.