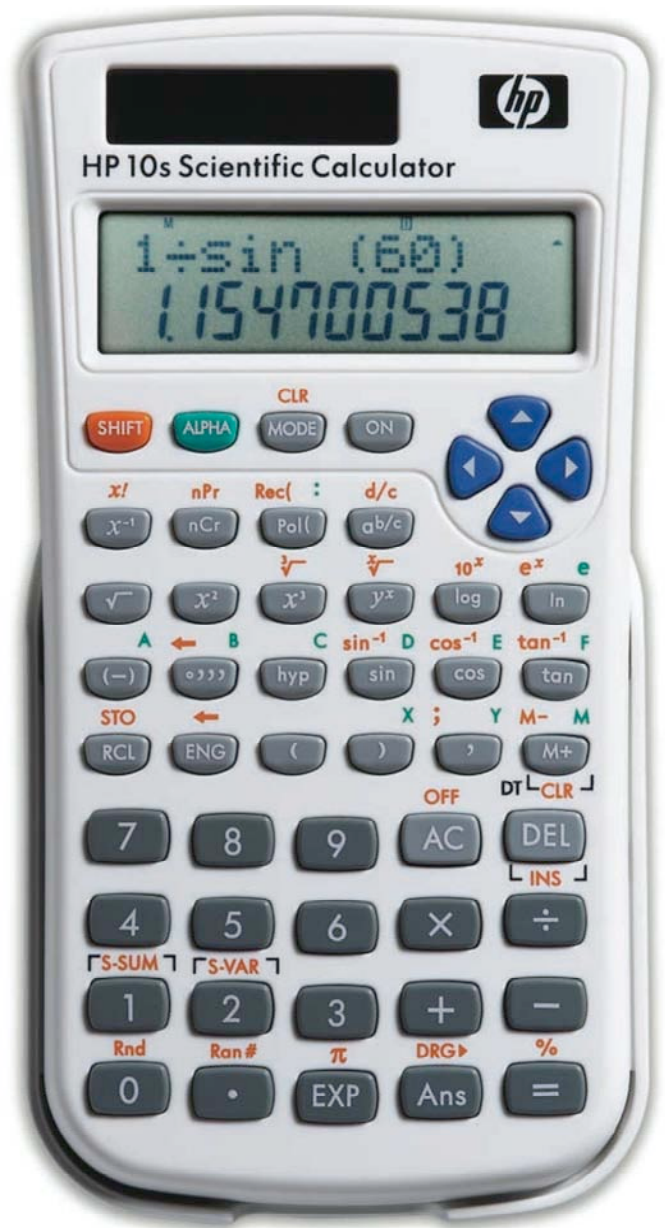**hp calculators**

HP 10s Introduction to the Learning Modules

Use of the Learning Modules

The HP 10s Learning Modules

Use of the learning modules

HP provides these learning modules to help readers learn about the HP 10s, or to gain experience in its use. They complement the handy, concise manual included with the calculator, and offer a hands-on way to try some of the many HP 10s features. Readers who do not have an HP 10s but wish to learn about it can benefit by studying these aids too. These documents can be printed on a black and white printer with no loss of information.

The learning modules start with a brief introduction to the topic, whose purpose, far from being a substitute for a good textbook, is to provide a summary of the main concepts that will later be demonstrated by the examples. Definitions, main theorems and properties are stated as clearly and concisely as possible.

The examples are the essential part of the learning modules. Their purpose is to demonstrate the capabilities of the calculator by providing the reader with ways of solving the commonest problems. They are provided purely for practice and do not represent any real situations or people, though.

Special symbols are used to show the sequence of keystrokes that perform the calculation. Shifted keys (i.e. orange legends on the HP 10s keyboard that are pressed after the [SHIFT] key) are shown as they appear on the keyboard. For example to get the exponential function, e^x, it is necessary to press [SHIFT] and then [In]. This would be shown in the learning modules as [SHIFT] [e^x].

The learning modules assume that the HP 10s modes and settings are as they would be when a new HP10s is turned on the first time. Changes to these settings needed for examples are described in the modules. After some examples have been worked through, the HP 10s settings might be very different from the original ones.

To return the HP 10s to its original state, press [SHIFT] [CLR] [3] [=]. Note that the CLR function here is on the top row key next to the ON button. But remember, DO NOT DO THIS IF YOU WANT TO KEEP ANY PROGRAMS, EQUATIONS OR DATA THAT ARE IN YOUR CALCULATOR. If you want to keep what is in memory but return the settings to their original values, you will have to change the settings one by one.

The HP 10s learning modules

♦   Basic Arithmetic
        Practice Doing Arithmetic.
♦   Operating Modes and Display Format
        The Operating Modes of the HP 10s. The Angular Mode. Display Format.
♦   Clearing, Editing and Correcting
        Resetting and Clearing. The Exchange Key. Editing and Correcting Statistical Data.
♦   Memory Calculations
        The Memory Keys. Practice Using the Memory to Solve Problems.
♦   Logarithmic Functions
        Logarithms and Antilogarithms. Practice Solving Problems Involving Logarithms.
♦   Solving Trigonometry Problems
        The Trigonometric Functions. The Angular Unit. Practice Solving Problems Involving Trigonometric Functions.
♦   Hyperbolic Functions
        Hyperbolic Functions. Practice Using Hyperbolic Functions.
♦   Powers and Roots
        Powers and Roots. Practice Solving Problems Involving Powers and Roots.

♦ Solving Problems Involving Percents
    Percentages. Practice Working Problems Involving Percentages.
♦ Solving Problems Involving Fractions
    Basic Concepts. Fractions on the HP 10s. Practice Working Problems Involving Fractions.
♦ Solving Problems Involving Unit Conversions
    Metric Units and Imperial Units. Unit Conversions on the HP 10s. Practice Working Problems Involving
    Conversions.
♦ Statistics – Averages and Standard Deviations
    Average and Standard Deviation. Practice Finding Averages and Standard Deviations.
♦ Statistics – Linear Regression
    Linear regression. Practice solving linear regression problems.
♦ Statistics – Advanced Regression
    Advanced regression. Practice solving non-linear regression problems.
♦ Probability – Rearranging Items
    Rearranging Items. Practice Solving Problems Involving Factorials, Permutations, and Combinations.
♦ Polar/Rectangular Coordinate Conversions
    Rectangular and Polar Coordinates. Practice Solving Problems Involving Coordinate Conversions.
♦ Solving Compound Interest Problems
    Compound Interest. Practice Solving Compound Interest Problems.
♦ Converting Angles and Times
    Angle Measurements. Time Measurements. Practice Solving Problems Involving Angles and Times.
♦ Random Numbers
    Random Numbers. Practice Using Random Numbers in Simulations