

# Texas Instruments calculators for students

From kindergarten  
to career.



LEARNING  
CENTER



# Calculators to learn and grow with. From Texas Instruments.



Increasingly important in our technical world, a thorough understanding of mathematics can shape a child's future. But recent studies have shown that while math problems become more complex and difficult, an alarming percentage of

individuals throughout the nation are having trouble mastering math skills. Many educators have found that the calculator can be a unique and positive factor in meeting these challenges in today's math classes.

By performing time-consuming and often difficult mechanics, the calculator can actually help students focus their attention on mathematical concepts and their applications. Students of all ages and skill levels — even those who have become convinced they can't do mathematics — are often motivated by the rapid, visual reinforcement that a correct answer on the calculator offers. Teachers, too, have discovered that by shortening procedural time, calculators can leave more time for teaching and working with students as they master the math skills needed for today's world.

To serve the needs of math students of all ages, Texas Instruments, in conjunction with mathematics educators at two major universities, has identified a group of calculators for educational use. From the limited function ABLE calculator to the advanced SR-51-II, these calculators can help students understand and use math concepts from kindergarten through college and career. Each of these calculators can be used to complement and extend the math skills of specific age groups.

Supplemental learning programs have been designed for classroom use with many of these calculators. Fun and challenging applications books are available for others. These materials were designed to help math educators easily incorporate calculators into their existing curricula, thereby taking advantage of the calculator, which has been endorsed by the National Council of Teachers of Mathematics as "a valuable instructional aid for mathematics education."

(NCTM Newsletter, December 1975)

**TEXAS INSTRUMENTS**  
INCORPORATED



## ABLE.™ A limited-function calculator with interchangeable keyboard faces.



Texas Instruments rechargeable ABLE calculator was specially designed as a learning aid for arithmetic basics at early elementary levels. Each rugged, solid-state ABLE calculator base unit includes six interchangeable keyboards ranging from a limited-function  $0 - 1, +$  face to a limited-function  $0 - 9, +, -, \times$  face. A recessed tab located at the front of

the ABLE calculator base allows the teacher to snap out one face and easily replace it with another to parallel the child's acquisition of new math skills. All faces feature extra large, easy-to-read numerals on colorful yellow and blue backgrounds.

ABLE calculators and faces are available for use in conjunction with K-1 "Elementary Mathematics Concepts with Calculators," a supplementary learning program for kindergarten/first grade students developed by math educators at the University of California's Lawrence Hall of Science. The ABLE calculator, when used as part of an integrated program, has been found effective in the teaching and learning of elementary math concepts—linking the concrete, visual, oral and abstract experiences of numerals, while constantly adapting to a child's developing skills.



## TI-1205. Four-function capability for upper elementary students.



Ideally suited for use with Texas Instruments 4-6 grade level "Elementary Mathematics Concepts with Calculators™" learning kit, the rechargeable TI-1205 meets all the criteria for beginning use of full-function calculators as described in the

December 1975 Newsletter of the National Council of Teachers of Mathematics.

The TI-1205 features a colorful face with large, easy-to-read numerals. A bright, 8-digit display shows calculation overflow indication, and a negative sign, just to the left of displayed numbers. The TI-1205 adds, subtracts, multiplies, divides — all in full-floating decimal. And there's an automatic constant for multiplication/division of a series of numbers by one number, or addition/subtraction of a constant number to or from a series of numbers.

Algebraic entry lets students enter numbers and press keys as they would write them on paper. Clearly labelled, easy-to-handle keys provide a positive "click" to assure students that a number has been entered. A separate clear entry key lets them clear a mistake in entry without repeating the entire problem.

When used in conjunction with 4-6 grade level "Elementary Mathematics Concepts with Calculators," developed by the University of California's Lawrence Hall of Science, the TI-1205 can be a positive force in the acquisition of mathematical concepts by upper elementary students.





## TI-1255. A rechargeable, full-function capability calculator with automatic constant and 4-key memory.



Texas Instruments rechargeable TI-1255 is well-suited for students in fundamental mathematics curricula. It includes the same features as the TI-1205, plus independent memory and change-sign key for entering negative numbers.

Using the TI-1255's versatile memory system, students are able to store intermediate results and answers as they explore secondary level math topics. Students may add to (M+) or subtract from (M-) memory a displayed number without affecting the calculation in process. Stored numbers may be displayed by using memory recall (MR), and the memory can be cleared (MC) without clearing the calculator.

Convenient algebraic entry allows students to enter problems in the same order they would write them on paper. A touch of the change-sign key (CS) changes the displayed number from positive to negative or vice versa, and the bright 8-digit display and large keyboard numerals offer good visibility.

A supplemental learning package, "Calculator Math™ Fundamental Mathematics," was developed and tested by the University of Denver Mathematics Laboratory for use with the TI-1255 expressly for the secondary level classroom.



Texas Instruments reserves the right to make changes in materials and specifications without notice.

## TI-30. Extended capability calculator with memory, scientific notation.

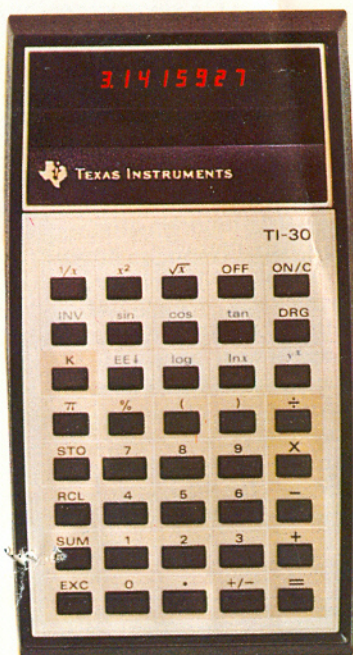


TI's unique AOS™ algebraic operating system makes the TI-30 calculator especially useful to secondary students. Problems are entered left-to-right and are executed following standard algebraic hierarchy: First powers. Then multiplication and division.

And finally, addition and subtraction. There's no special entry sequence to learn; thus, students can focus on the mathematical concepts and their application.

A bright 8-digit display indicates negative sign, overflow and underflow, and in scientific notation indicates 5 digits plus 2-digit exponent. Its powerful slide-rule features and keys are ideal for use throughout the high school curriculum: memory system for storing intermediate results, up to four pending operations enclosed in up to 15 sets of parentheses, **DRG**, **x<sup>2</sup>**, **√x**, **1/x**, **INV**, **sin**, **cos**, **tan**, **K**, **EE±**, **log**, **lnx**, **y<sup>x</sup>** and **%**.

"Calculator Math™ Introductory Algebra," a supplemental mathematics learning program, was developed by the University of Denver's Mathematics Laboratory for use with the TI-30 in secondary math classes. A challenging and informative book, *The Great International Math on Keys Book*, is also available for use with the TI-30. Its 224 pages of valuable operating tips, math facts, useful formulas, puzzles and games are of particular relevance to high school students.





## SR-51-II. Advanced professional electronic calculator.



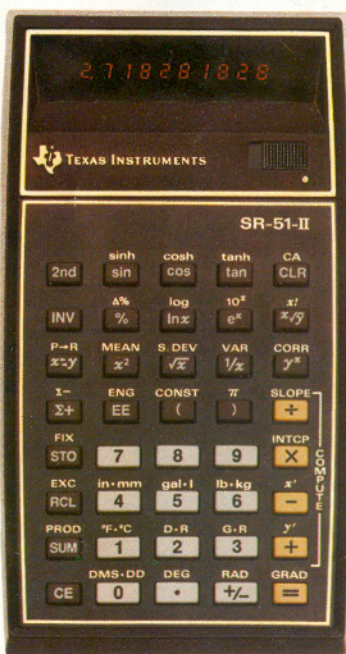
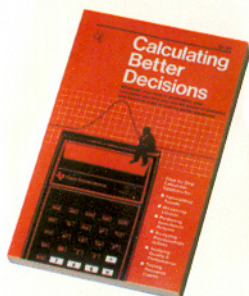
This powerful, full-function calculator is ideal for the advanced high school student to grow with into college and career. It offers solutions to simple arithmetic as well as trigonometric, logarithmic, and hyperbolic functions. It performs all the classical slide-

rule functions and more: roots and powers, factorials, reciprocals, percent and percent-change, linear regression and trend-line analysis. Students can use the SR-51-II to help them with complex statistical problems as well: mean, variance, standard deviation and correlation along with seven unit conversions by direct-key. It has three addressable memories with direct memory arithmetic and memory/display exchange.

TI's AOS™ algebraic operating system allows complex mathematic expressions to be entered in the same order that they are written. Up to nine levels of parentheses are available to ensure proper and accurate interpretation of expressions. And, it handles up to five pending operations.

A fixed decimal option provides results displayed to as many as eight decimal places at direction of user. And, the SR-51-II can state numbers in scientific or engineering notation.

*Calculating Better Decisions*, a challenging and informative book, illustrates how the advanced, professional SR-51-II calculator can be a powerful decision-making tool – in school, business and everyday life.



## Little Professor. A fun way for children to practice basic math facts.



The Little Professor is a unique product designed specifically to aid children 5 years and older in exploring basic mathematics. Although it is not truly a calculator, the Little Professor generates a sequence of problems — over 16,000 preprogrammed

problems in all — and involves children in math practice through an enjoyable instant feedback and reinforcement situation.

By using the four-position switch indicating degrees of difficulty, and the appropriate function key (  $+$  ,  $-$  ,  $\times$  ,  $\div$  ), the teacher can select the range of random math problems needed for individual students. The student can then work independently as he progresses toward mastering math skills.

Problems appear on the large VLED display as an equation, and the child is given three opportunities to input the correct answer through the keyboard. An error indication is displayed for one second each time the child incorrectly answers the problem. If the correct answer is not given in three chances, the completed equation appears in the display, allowing the child to see his mistake. By pressing "GO", he can then proceed to the next problem. If the child inputs the correct answer, the complete equation is displayed for one second and a new problem appears. As an additional incentive, the Little Professor displays the score of correct first answers after each set of 10 problems.

Powered by a single nine-volt disposable battery, the Little Professor is fully portable and is perfect for individual student use in the classroom.

