Texas Instruments 36PRO/TBL/1L1

Texas Instruments TI-36X Pro Engineering/Scientific Calculator User Manual

Model: TI-36X Pro (36PRO/TBL/1L1)
Brand: Texas Instruments

1. Product Overview

The Texas Instruments TI-36X Pro is an advanced engineering/scientific calculator designed for a wide range of academic and professional applications. It is ideal for curricula where graphing technology may not be permitted, offering robust functionality for algebra, geometry, trigonometry, statistics, and calculus. This solar-powered unit features a MultiView display that shows multiple calculations simultaneously and MathPrint technology to display expressions, symbols, and stacked fractions as they appear in textbooks.

Key Features

- MultiView display shows multiple calculations at the same time on screen.
- MathPrint shows math expressions, symbols and stacked fractions as they appear in textbooks.
- Ideal for high school through college: Algebra 1 & 2, Geometry, Trigonometry, Statistics, Calculus, Biology, etc.
- Convert fractions, decimals and terms including Pi into alternate representations.
- Select degrees/radians, floating/fix, number format modes.

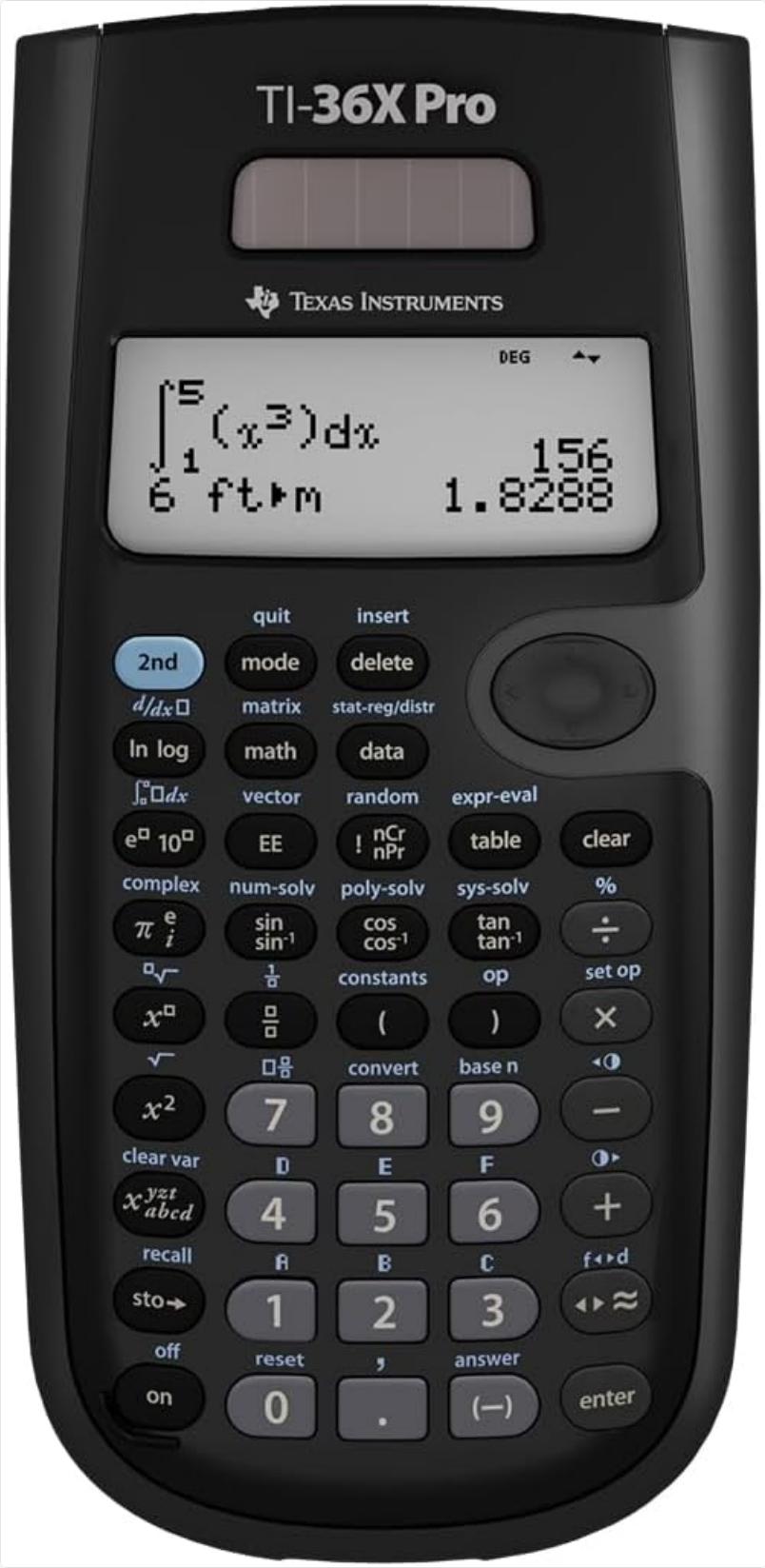

Figure 1.1: Front view of the Texas Instruments TI-36X Pro Engineering/Scientific Calculator.

2. Setup

Powering On/Off

The TI-36X Pro calculator is dual-powered by solar energy and a lithium metal battery (included). It is designed for efficient power management.

- To turn on the calculator, press the **ON** button located at the bottom left of the keypad.
- To turn off the calculator, press **2nd** followed by the **OFF** button (which is the same as the **ON** button).

Initial Use

Upon first use, or after a prolonged period of inactivity, the calculator should power on automatically in sufficient light. No specific initial setup is typically required beyond powering it on.

Figure 2.1: The TI-36X Pro calculator in an active use scenario.

3. Operating Instructions

Display Features

- **MultiView Display:** Allows you to view multiple calculations, entries, and results simultaneously on the screen. This is particularly useful for comparing results or reviewing previous steps.
- **MathPrint:** Displays mathematical expressions, symbols, and stacked fractions in a natural, textbook-like format, enhancing readability and comprehension.

Basic Operations

- **Arithmetic:** Use the standard +, -, ×, ÷ keys for addition, subtraction, multiplication, and division.
- **Fractions and Decimals:** The calculator supports direct input and conversion between fractions and decimals. Use the fraction key (**n/d**) for input and the **f↔d** key for conversion.
- **Exponents and Roots:** Utilize the x^2, x^3, $\sqrt{}$, and $\sqrt[n]{}$ functions for powers and roots.

Advanced Functions

- **Trigonometry:** Perform trigonometric calculations (sin, cos, tan) and their inverses ($\sin^{-1}$, $\cos^{-1}$, $\tan^{-1}$). Ensure the correct angle mode (degrees, radians, grads) is selected using the **MODE** button.
- **Complex Numbers:** The calculator supports operations with complex numbers.
- **Statistics:** Access statistical functions for data analysis, including one-variable and two-variable statistics.
- **Calculus:** Features include numerical derivative and integral calculations.
- **Equation Solvers:** Solve polynomial equations and systems of linear equations.

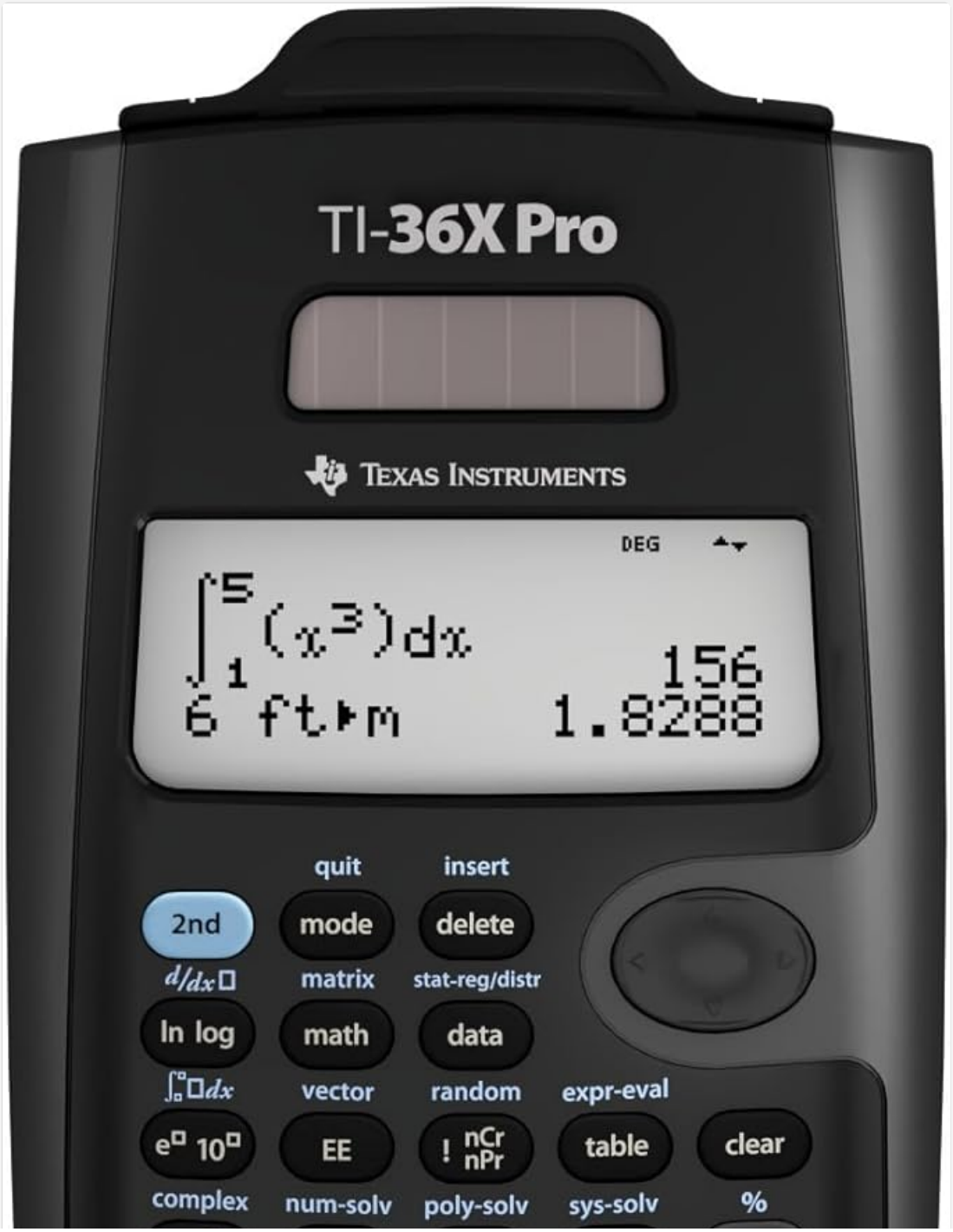

Figure 3.1: Detailed view of the TI-36X Pro keypad and display.

4. Maintenance

Cleaning and Care

- Wipe the calculator with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- Avoid exposing the calculator to extreme temperatures, humidity, or direct sunlight for extended periods.
- Store the calculator in its protective cover when not in use to prevent scratches and damage.

Battery Information

The TI-36X Pro uses one Lithium Metal battery (CR2032, 3V) which is included. The calculator is also solar-powered, extending battery life. The battery is not user-replaceable. If the calculator stops functioning in adequate light, it may indicate a need for professional battery replacement.

5. Troubleshooting

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
Calculator does not turn on.	Insufficient light for solar power; depleted battery.	Ensure adequate lighting. If problem persists, the internal battery may need replacement by a qualified service center.
Display shows 'ERROR'.	Invalid input or mathematical operation.	Review your input for syntax errors or mathematical impossibilities (e.g., division by zero, square root of a negative number). Press **CLEAR** to clear the error.
Results are unexpected.	Incorrect mode setting (e.g., angle mode); incorrect order of operations.	Check the current angle mode (DEG, RAD, GRAD) using the **MODE** button. Verify the order of operations for complex expressions.
Keys are unresponsive.	Temporary software glitch.	Press the **RESET** button (small button on the back, may require a paperclip). Note: This will clear all memory.

6. Technical Specifications

Feature	Specification
Product Dimensions	7.22 x 3.27 x 0.1 inches
Item Weight	4 ounces
Item Model Number	36PRO/TBL/1L1
Batteries	1 Lithium Metal battery required (included)
Calculator Type	Engineering/Scientific
Power Source	Battery Powered / Solar Powered
Screen Size	3 inches (diagonal)
Manufacturer	Texas Instruments
Color	Black

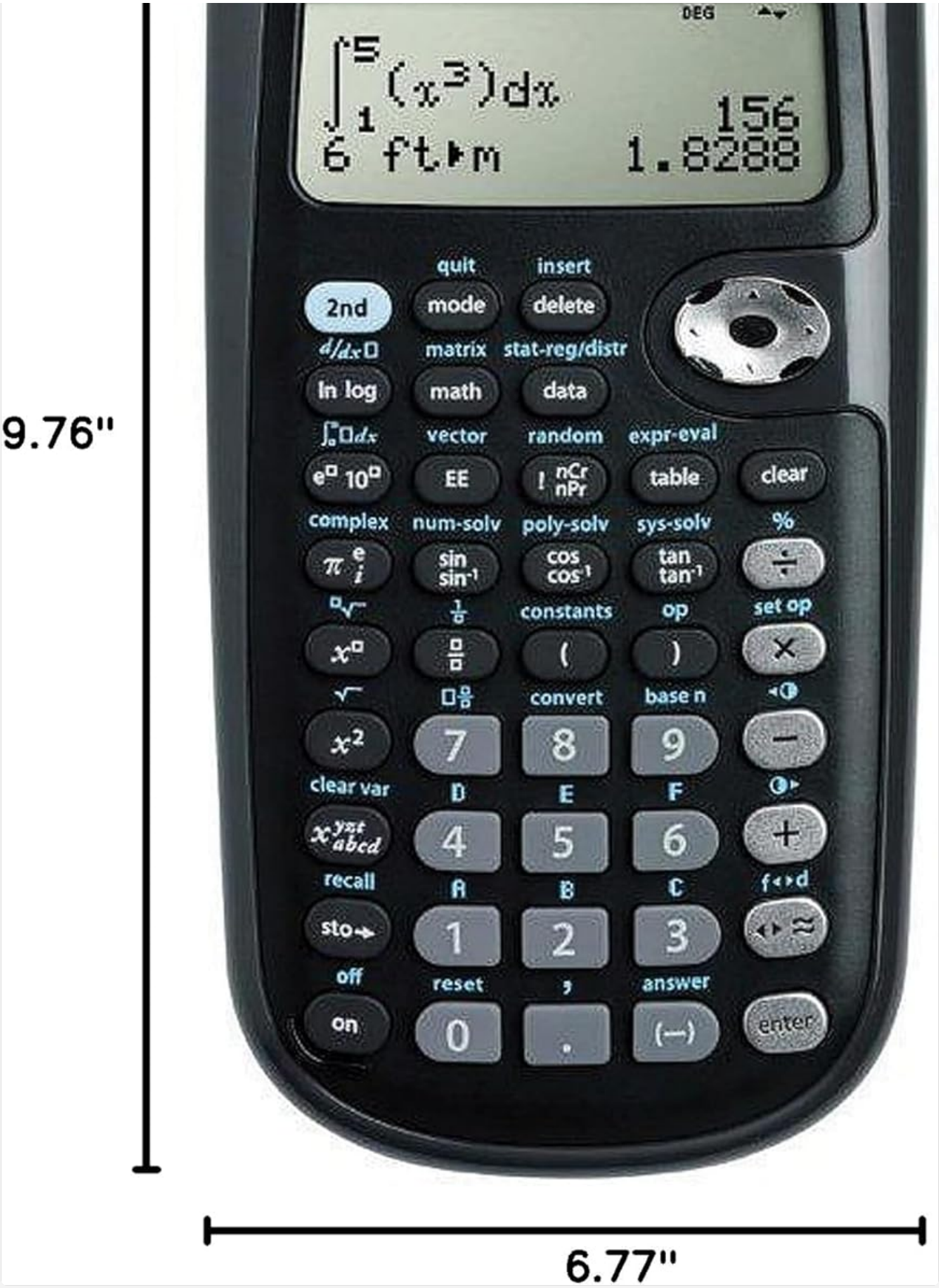

Figure 6.1: Product dimensions of the TI-36X Pro calculator.

7. Warranty and Support

For detailed warranty information and further support, please refer to the official Texas Instruments

documentation or contact their customer service.

- **Official User Manual (PDF):** For a comprehensive guide, you can download the official user manual from here.
- **Online Resources:** Visit the Texas Instruments education website for additional resources, tutorials, and support at education.ti.com/36-info.