Action	Result
Type a, click to the right, click	$\int_a^{\blacksquare}$
Type b, click to the right, click	$\int_a^b \frac{\blacksquare}{\square}$
Type 2 and click in the denominator box	$\int_a^b \frac{2}{\blacksquare}$
Click	$\int_a^b \frac{2}{\sqrt{\blacksquare}}$
Type $3-5x$, click type 2, click to the right	$\int_a^b \frac{2}{\sqrt{3-5x^2}}\Big\vert$
Type $dx+1$	$\int_a^b \frac{2}{\sqrt{3-5x^2}}\,dx+1\Big\vert$

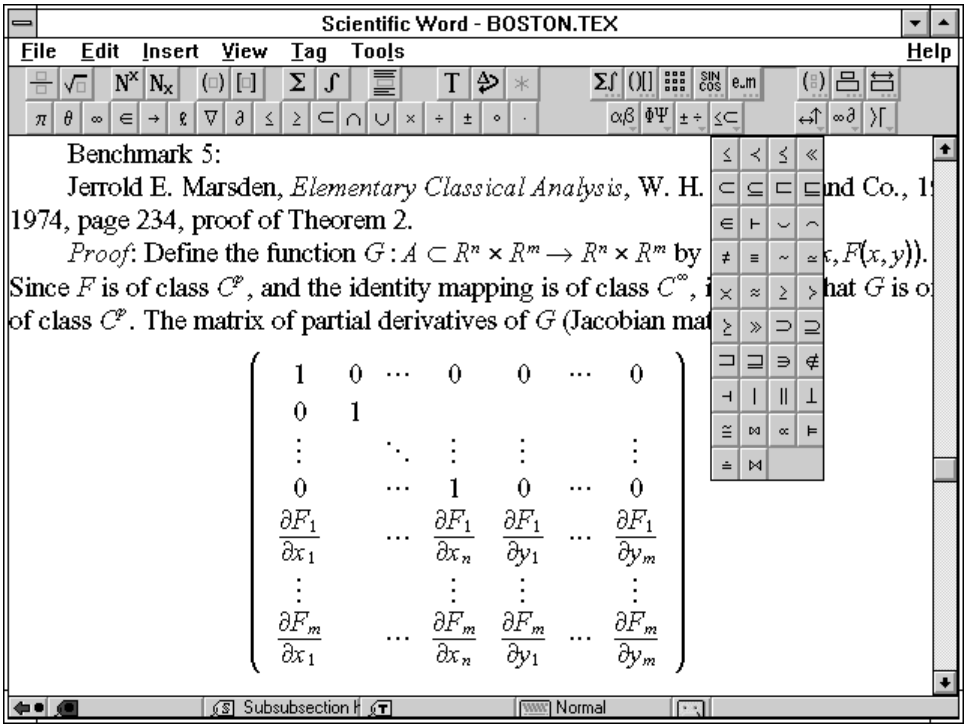
Here are the steps to enter the same formula $\int_a^b \frac{2}{\sqrt{3-5x^2}}\,dx+1$ directly from the keyboard.

Entering an Integral Using the Keyboard	
Action	**Result**
Press *ctrl+i*	$\int\vert$
Press *ctrl+l* or *ctrl+down arrow*	$\int_{\blacksquare}$
Type a, press *tab*	$\int_a^{\blacksquare}$
Type b, press *spacebar*, press *ctrl+f*	$\int_a^b \frac{\blacksquare}{\square}$
Type 2, press *down arrow*	$\int_a^b \frac{2}{\blacksquare}$
Type *ctrl+r*	$\int_a^b \frac{2}{\sqrt{\blacksquare}}$
Type $3-5x$, press *ctrl+H*, type 2, press *end*	$\int_a^b \frac{2}{\sqrt{3-5x^2}}\Big\vert$
Type $dx+1$	$\int_a^b \frac{2}{\sqrt{3-5x^2}}\,dx+1\Big\vert$

The number of keystrokes is small and follows the same logic as the mouse operations. SCIENTIFIC WORD is designed so that you can get started using the mouse with very little effort. Once you learn the keyboard shortcuts, you can enter text and mathematics very quickly without the mouse.

3 Available Symbols

The available symbols are grouped in seven drop-down panels. The symbol panels drop down from the icon area at the top of the screen:



The binary relations symbol panel

The panels and their contents are as follows:

3.1 Lowercase Greek

$\alpha\beta\gamma\delta\epsilon\zeta\eta\theta\vartheta\iota\kappa\lambda\mu\nu\xi\pi\varpi\rho\sigma\varsigma\tau\upsilon\phi\varphi\chi\psi\omega$

3.2 Uppercase Greek

$\Gamma\Delta\Theta\Lambda\Xi\Pi\Sigma\Upsilon\Phi\Psi\Omega$

3.3 Binary Operations

$\pm\ \mp\ \setminus\ \cdot\ \times\ *\ \star\ \diamond\ \circ\ \bullet\ \div\ \triangleleft\ \vee\ \wedge\ \oplus\ \ominus\ \otimes\ \oslash\ \cap\ \cup\ \uplus\ \sqcap\ \sqcup\ \triangleleft\ \triangleright\ \wr$
$\bigcirc\ \triangle\ \triangledown\ \triangleright\ \odot\ \dagger\ \ddagger\ \amalg\ \trianglelefteq\ \trianglerighteq$

3.4 Binary Relations

$\leq\ \prec\ \preceq\ \ll\ \subset\ \subseteq\ \sqsubset\ \sqsubseteq\ \in\ \vdash\ \smile\ \frown\ \neq\ \equiv\ \sim\ \simeq\ \asymp\ \approx\ \geq\ \succ\ \succeq\ \gg$
$\supset\ \supseteq\ \sqsupset\ \sqsupseteq\ \ni\ \notin\ \dashv\ |\ \|\ \perp\ \cong\ \bowtie\ \propto\ \models\ \doteq\ \Join$

3.5 Arrows

$\leftarrow\ \Leftarrow\ \rightarrow\ \Rightarrow\ \leftrightarrow\ \Leftrightarrow\ \mapsto\ \hookleftarrow\ \leftharpoonup\ \leftharpoondown\ \rightleftharpoons\ \uparrow\ \Uparrow\ \downarrow\ \Downarrow\ \updownarrow\ \longleftarrow\ \Longleftarrow\ \longrightarrow\ \Longrightarrow$
$\longleftrightarrow\ \Longleftrightarrow\ \longmapsto\ \hookrightarrow\ \rightharpoonup\ \rightharpoondown\ \rightsquigarrow\ \Updownarrow\ \nearrow\ \searrow\ \swarrow\ \nwarrow$

3.6 Miscellaneous

$\ldots\ \cdots\ \vdots\ \ddots\ \int\ \aleph\ \hbar\ \imath\ \jmath\ \ell\ \wp\ \Re\ \Im\ \partial\ \infty\ \Box\ \forall\ \exists\ \neg\ \flat\ \natural\ \sharp\ \backslash\ \emptyset\ \nabla\ \surd\ \top\ \bot\ \|\ \angle\ \triangle\ \diamond$
$\sharp\ \clubsuit\ \diamondsuit\ \heartsuit\ \spadesuit$

3.7 Special Delimiters

$\lfloor\ \rfloor\ \lceil\ \rceil\ \langle\ \rangle$

Symbols can also be typed directly from the supplied Greek and symbol keyboards. Alternatively, if you know the TEX name of a symbol, you can type it directly. For example, to enter α, you hold down the *ctrl* key and with the key held down, type `alpha`.

4 Text and Mathematics

SCIENTIFIC WORD treats plain text in much the same way as any other word processor, following the standard Windows conventions for inserting, deleting, selecting, cutting, copying and pasting. To switch from text to mathematics, you click the Math/Text icon at the top of the screen, or press *ctrl+m*. While you are in mathematics, characters are italicized, functions like sin and cos are recognized automatically, and the spacing is supplied around binary operations and relations like + and =. You can convert any selection to or from mathematics by clicking the Math/Text icon. By default, mathematics is shown in red on the screen. This feature makes it easy to discern and read the mathematics, and also makes clear whether punctuation is or is not part of the mathematics.

5 More Mathematics

The most frequently used mathematical objects are available with a single mouse click. A complete range of objects is available through SCIENTIFIC WORD's dialogs. Here is the operator dialog which gives you the full set of large operators available in $\mathcal{AMS}$-TEX.