Chapter 15
Element Creator Palettes

There are seven different Element Creator palettes available to aid you in building your equations. To switch between each palette, select the corresponding button along the top row of the panel.

In addition, note that the middle row of buttons contains a set of common functions that are available on all seven palettes.

Palettes

The different palettes are organized by mathematical function.

GreekSymbolPalette.tiff ¬

· **Greek Symbols**

This palette contains the standard greek alphabet and some variations. Greek symbols use the NeXT Symbol font, so it is not possible to typeset them in Bold, Italic, or Roman.

(Note that some upper case greek symbols are very similar to standard type, so be careful to avoid confusion.)

MiscSymbolPalette.tiff ¬

· **Misc. Symbols**

This palette holds various other symbols that are commonly used in mathematical expressions.

Although the ª|º and the ª||º symbols are also found on the Binary Operators & Relations palette, the symbols on the Misc. Symbols palette are typeset as Symbol elements with no additional spaces around them, whereas EquationBuilder inserts additional spacing around these symbols when they are considered Relation elements.

BinOpRelPalette.tiff ¬

· **Binary Operators & Relations**

This palette contains standard symbols used for binary operations, such as +, -, etc., and standard symbolic relations like =, <, αnd >.

Note that the $^a|^o$ and $^a||^o$ buttons on this palette act differently than the same symbols found on the Misc. Symbols palette. EquationBuilder treats Relation elements differently from plain Symbol elements, placing extra spacing around relations and allowing you to negate relations through the use of the Attributes inspector (see Chapter 17).

AccBraceBarsPalette.tiff ¬

· **Accents, Braces, & Bars**

This palette holds a variety of accents, as well as over/underlines and over/underbraces.

Note that over/underlines and over/underbraces scale to encompass the bounds of the elements they contain; however, accents remain a fixed size and simply center over their contents.

OpCalcPalette.tiff ¬

· **Operators & Calculus**

This palette holds common large operators such as integrals and summations. In addition, calculus operations are also provided on this palette, but for convenience only. Calculus operations can also be constructed out of elements from other palettes.

Note that the size of any large operator, as well as the position of its limits, can be modified through the use of its Attributes inspector (see Chapter 17). Calculus operations, because they are simply composites of other elements, do not have any unique Attributes inspector.

MultMatPalette.tiff ¬

· **Multilines & Matrices**

This palette contains two buttons for generating Multiline (n-lines) and Matrix (n x m) elements. The number of lines in a Multiline element, and the number of rows and columns in a Matrix element, are adjustable via their respective Attributes inspectors (see Chapter 17).

Since centered, vertical, and diagonal dot symbols are used extensively with matrices, they are included on this palette for convenience. These symbols are also located on

the Misc. Symbols palette.

FunctPalette.tiff ¬

· **Functions**

This palette provides some of the standard mathematical functions for convenience. Note that functions generated on this palette are represented by EqB as String elements set in the default roman font. The text of the String is customizable through the Attributes inspector (see Chapter 17).

Additionally, all of the functions contained on this palette, as well as any not shown on the palette, can be entered using the keyword text field (see Appendix B).