

Chapter 17: More about Math



Every math character is given an identifying code number between 0 and 4095, obtained by adding 256 times the family number to the position number. This is easily expressed in hexadecimal notation, using one hexadecimal digit for the family and two for the character; for example, "24A stands for character "4A in family 2. Each character is also assigned to one of eight classes, numbered 0 to 7, as follows:

<i>Class</i>	<i>Meaning</i>	<i>Example</i>	<i>Class</i>	<i>Meaning</i>	<i>Example</i>
0	Ordinary	/	4	Opening	(
1	Large operator	\sum	5	Closing)
2	Binary operation	+	6	Punctuation	,
3	Relation	=	7	Variable family	x

Classes 0 to 6 tell what “part of speech” the character belongs to, in math-printing language; class 7 is a special case discussed below. The class number is multiplied by 4096 and added to the character number, and this is the same as making it the leading digit of a four-digit hexadecimal number. For example, Appendix B defines `\sum` to be the math character "1350, meaning that it is a large operator (class 1) found in position "50 of family 3.