Algebra

Symbol	Entity	Hex	Description
−	−	−	Subtraction
×	×	×	Multiplication
÷	÷	÷	Division
≠	≠	≠	Not equal
≈	≈	≈	Approximately equal
<	<	<	Less than
≤	≤	≤	Less than or equal

>	>	>	Greater than
≥	≥	≥	Greater than or equal
±	±	±	Plus or minus
∝	∝	∝	Proportional
∑	∑	∑	Summation
∏	∏	∏	Product
⌊	⌊	⌊	Left floor
⌋	⌋	⌋	Right floor
⌈	⌈	⌈	Left ceiling
⌉	⌉	⌉	Right ceiling

The ⋅ entity can be used as an alternative to the ×operator. And, of course, an ASCII slash can be used in place of÷.

Calculus

Symbol	Entity	Hex	Description
′	′	′	Prime (1st derivative)
″	″	″	Double prime (2nd derivative)
‴	‴	‴	Triple prime (3nd derivative)
⁗	⁗	⁗	Quadruple prime (4th derivative)
∂	∂	∂	Partial Differential
Δ	Δ	Δ	Increment
∇	∇	∇	Gradient
∫	∫	∫	Integral
∬	∬	∬	Double integral
∭	∭	∭	Triple integral
⨌	⨌	⨌	Quadruple integral
∮	∮	∮	Contour integral
∲	∲	∲	Clockwise contour integral

∳	∳	∳	Anticlockwise contour integral
∯	∯	∯	Surface integral
∰	∰	∰	Volume integral
∞	∞	∞	Infinity

The ′ and ″ symbols are also the preferred way to mark up feet/inch and minutes/seconds measurements.

Ellipses

Symbol	Entity	Hex	Description
…	…	…	Horizontal ellipsis
⋮	⋮	⋮	Vertical ellipsis
⋯	⋯	⋯	Midline horizontal ellipsis
⋰	⋰	⋰	Up right diagonal ellipsis
⋱	⋱	⋱	Down right diagonal ellipsis

Geometry

Symbol	Entity	Hex	Description

°	°	°	Degrees
∠	∠	∠	Angle
∡	∡	∡	Measured angle
∟	∟	∟	Right angle
⦜	⦜	⦜	Right angle with square
◿	⊿	⊿	Right triangle
○	○	○	Circle
△	△	△	Triangle
□	□	□	Square
▱	▱	▱	Parallelogram
∥	∥	∥	Parallel
∦	∦	∦	Not parallel
⊥	⊥	⊥	Perpendicular
≅	≅	≅	Congruent

→	→	→	Ray (used with <mover>)
↔	↔	↔	Line (used with <mover>)
-	(n/a)	-	Line Segment (used with <mover>)

You may also find other useful shapes in the Geometric Shapes Block.

Greek Letters

Letter		Entities		Hex Codes	
A	α	Α	α	Α	α
B	β	Β	β	Β	β
Γ	γ	Γ	γ	Γ	γ
Δ	δ	Δ	δ	Δ	δ
E	ε	Ε	ε	Ε	ε
Z	ζ	Ζ	ζ	Ζ	ζ
H	η	Η	η	Η	η

Θ	θ	Θ	θ	Θ	θ
Ι	ι	Ι	ι	Ι	ι
Κ	κ	Κ	κ	Κ	κ
Λ	λ	Λ	λ	Λ	λ
Μ	μ	Μ	μ	Μ	μ
Ν	ν	Ν	ν	Ν	ν
Ξ	ξ	Ξ	ξ	Ξ	ξ
Ο	ο	Ο	ο	Ο	ο
Π	π	Π	π	Π	π
Ρ	ρ	Ρ	ρ	Ρ	ρ
Σ	σ	Σ	σ	Σ	σ
Τ	τ	Τ	τ	Τ	τ

Υ	υ	Υ	υ	Υ	υ
Φ	φ	Φ	φ	Φ	φ
Χ	χ	Χ	χ	Χ	χ
Ψ	ψ	Ψ	ψ	Ψ	ψ
Ω	ω	Ω	ω	Ω	ω

As you can see, Greek letter entities follow a very straightforward naming convention. It's simply their letter name spelled out, using an initial capital for capital letters and lowercase for minuscules.

Invisible Operators

Entity	Short Entity	Hex	Description
⁡	⁡	⁡	Function application
⁢	⁢	⁢	Invisible multiplication
⁣	⁣	⁣	Invisible separator
(n/a)	(n/a)	⁤	Invisible addition

Invisible operators are used to explicitly clarify ambiguous expressions like x(y). Please see the Invisible Operators section for details.

Logic

Symbol	Entity	Hex	Description
¬	¬	¬	Negation
∧	∧	∧	Logical conjunction
∨	∨	∨	Logical disjunction
⊻	⊻	⊻	Exclusive disjunctio
∀	∀	∀	Universal quantification
∃	∃	∃	Existential quantification
⇒	⇒	⇒	Material implication

⇔	⇔	⇔	Material equivalence
□	◻	◻	Necessarily
◊	◊	◊	Possibly
⊢	⊢	⊢	Provable
⊨	⊨	⊨	Entails
∴	∴	∴	Therefore

The ⊕ character is also used as a common alternative for exclusive disjunction. It can be accessed through the ⊕ entity or the⊕ hexadecimal reference.

Set Theory

Symbol	Entity	Hex	Description
∅	∅	∅	Empty Set
∈	∈	∈	Member of set
∉	∉	∉	Not a member of set
⊆	⊆	⊆	Subset

⊈	⊈	⊈	Not a subset
⊂	⊂	⊂	Strict subset
⊄	⊄	⊄	Not a strict subset
⊇	⊇	⊇	Superset
⊉	⊉	⊉	Not a superset
⊃	⊃	⊃	Strict superset
⊅	⊅	⊅	Not a strict superset
∩	∩	∩	Intersection
∪	∪	∪	Union
\	∖	∖	Complement

Note that some authors prefer to use the ⫋ and ⫌ symbols for strict subsets and supersets. These are available through the ⊊ and⊋ entities or the ⊊ and ⊋ hexadecimal codes.

Vectors & Functions

Symbol	Entity	Hex	Description

⋅	⋅	⋅	Dot product
□	⨯	⨯	Cross product
‖	‖	‖	Norm (magnitude) bars
⟨	⟨	⟨	Left angle bracket
⟩	⟩	⟩	Right angle bracket
∘	∘	∘	Function composition
→	→	→	General function mapping
↦	↦	↦	Concrete function mapping
ı	ı	ı	Dotless i
ȷ	ȷ	ȷ	Dotless j

Dotless i's and j's are typically combined with a caret (^) to mark up i-hat and j-hat vectors, as described in Dotless Letters