```
\cosec
                                \rightarrow cosec
\xprime
                                \rightarrow x'
                                \rightarrow x''
\xdoubleprime
\xprimevec
                                \rightarrow \quad \mathbf{x}'
                               \rightarrow \quad x''
\xdoubleprimevec
\xvec

ightarrow \mathbf{x}
\V[1]
                                \rightarrow ~\#1
\bcc[1]
                                \rightarrow ~\#1
\operatorname{\dist}[1]
                                \rightarrow \hat{\#1}
                                \rightarrow d\mathcal{V}
\dV

ightarrow ~\mathcal{V}
\Vcal
\K
\bigK
\bigsum
\oneover[1]
\oneovereps
\oneoverpieps
                                       \tfrac{1}{2\pi\epsilon_0}
\oneovertwopieps
                                       \frac{1}{2\epsilon_0}
\oneovertwoeps
                                      \frac{1}{4\pi}
\oneoverfourpi
\onehalf
\onehalfsmall

ightarrow \frac{\partial \#1}{\partial n}
\normalderiv[1]
\rprime
                                \rightarrow r'
\rprimev
```

\vrprime	\rightarrow	\mathbf{r}'
\vr	\rightarrow	\mathbf{r}
\gt	\rightarrow	\rightarrow
\vE	\rightarrow	${f E}$
\vEtot	\rightarrow	\mathbf{E}_{TOT}
\vEext	\rightarrow	\mathbf{E}_{EXT}
\xhat	\rightarrow	$\hat{\mathbf{x}}$
\yhat	\rightarrow	$\hat{\mathbf{y}}$
\zhat	\rightarrow	$\hat{\mathbf{z}}$
\rhat	\rightarrow	$\hat{\mathbf{r}}$
\shat	\rightarrow	$\hat{\mathbf{s}}$
\rvec	\rightarrow	r
\svec	\rightarrow	S
\phihat	\rightarrow	$\hat{\phi}$
\nhat	\rightarrow	$\hat{\mathbf{n}}$
\nhatprime	\rightarrow	$\hat{\mathbf{n}}'$
\khat	\rightarrow	$\hat{\mathbf{k}}$
\GreenF	\rightarrow	$G(\mathbf{x}, \mathbf{x}')$
\GreenFN	\rightarrow	$G_N(\mathbf{x},\mathbf{x}')$
\gradient	\rightarrow	∇
\gradientprime	\rightarrow	abla'
\gradientprimeii	\rightarrow	$ abla'^2$

 $\texttt{\delx}[1]$

 $\label{eq:dely} $$ \dely[1] $$ \delz[1] $$$

$\delt[1]$	\rightarrow	$\frac{\partial \#1}{\partial t}$
$\oneover[1]$	\rightarrow	$\frac{1}{\#1}$
\partialx	\rightarrow	$\frac{\partial}{\partial x}$
\partialy	\rightarrow	$\frac{\partial}{\partial y}$
\partialz	\rightarrow	$\frac{\partial}{\partial z}$
\partialt	\rightarrow	$\frac{\partial}{\partial t}$
\partialr	\rightarrow	$\frac{\partial}{\partial r}$
\partialrho	\rightarrow	$\frac{\partial}{\partial \rho}$
\partialphi	\rightarrow	$rac{\partial}{\partial \phi}$
$\verb \partialrhoof [1] $	\rightarrow	$\frac{\partial \#1}{\partial \rho}$
$\verb \partialphiof [1] $	\rightarrow	$\frac{\partial \#1}{\partial \phi}$
\partialphiphi	\rightarrow	$\frac{\partial^2}{\partial \phi^2}$
$\verb \partialphiphiof [1] $	\rightarrow	$\frac{\partial^2 \# 1}{\partial \phi^2}$
\partialxt	\rightarrow	$\frac{\partial^2}{\partial x^2}$
\partialyt	\rightarrow	$\frac{\partial^2}{\partial y^2}$
\partialzt	\rightarrow	$\frac{\partial^2}{\partial z^2}$
\partialtt	\rightarrow	$\frac{\partial^2}{\partial t^2}$
\partialrt	\rightarrow	$\frac{\partial^2}{\partial r^2}$
\fullxt	\rightarrow	$\frac{d^2}{dx^2}$
\fullyt	\rightarrow	$\frac{d^2}{dy^2}$
\fullzt	\rightarrow	$\frac{d^2}{dz^2}$
\fulltt	\rightarrow	$\frac{d^2}{dt^2}$
\fullrt	\rightarrow	$\frac{d^2}{dr^2}$
\fullx	\rightarrow	$\frac{d}{dx}$
\fully	\rightarrow	$\frac{d}{dy}$
		-

\fullz	\rightarrow	$\frac{d}{dz}$
\fullt	\rightarrow	$\frac{d}{dt}$
\fullr	\rightarrow	$\frac{d}{dr}$
$\fill [1]$	\rightarrow	$\frac{d^2\#1}{dr^2}$
\fulltheta	\rightarrow	$\frac{d}{d\theta}$
$\verb \fullthetaof[1] $	\rightarrow	$\frac{d\#1}{d\theta}$
$\verb \fullphiof [1] $	\rightarrow	$\frac{d\#1}{d\phi}$
$\verb \fullrhoof[1] $	\rightarrow	$\frac{d\#1}{d\rho}$
\fullrho	\rightarrow	$\frac{d}{d\rho}$
$\verb \fullphiphiof[1] $	\rightarrow	$\frac{d^2\#1}{d\phi^2}$
\fullphiphi	\rightarrow	$\frac{d^2}{d\phi^2}$
\fullcos	\rightarrow	$\frac{d}{d\cos\theta}$
$\verb \fullcosof[1] $	\rightarrow	$\frac{d\#1}{\cos\theta}$
\meters	\rightarrow	m
\coulombs	\rightarrow	\mathbf{C}
\farads	\rightarrow	F
$\abs[1]$	\rightarrow	#1
\amperes	\rightarrow	A
\newtons	\rightarrow	N
/DV	\rightarrow	ΔV
\ohms	\rightarrow	Ω
\volts	\rightarrow	V
\watts	\rightarrow	W
\kg	\rightarrow	kg
\amu	\rightarrow	amu

 $\verb|\Tesla| \qquad \to \quad T$

\secs o sec

 $\verb|Volts| \rightarrow V$

\Joules \rightarrow J

\pf o pf

 $\$ henries \rightarrow Henries

\oneoverepsilon $ightarrow rac{1}{\epsilon_0}$

\JV $ightarrow {f J}$

 $\hspace{1cm} \forall \mathtt{r} \hspace{1cm} \to \hspace{1cm} \mathbf{F}$

 $\ \ \, \text{ } \ \ \, \text{ } \ \, \text{$

 $\texttt{\ \ } \forall v \texttt{perp} \qquad \qquad \rightarrow \quad v_{\bot}$

 $\hspace{0.1cm} \hspace{0.1cm} \hspace$

\cross ightarrow imes

 $\verb|\vpperp| \qquad \rightarrow \ \mathbf{p}_\perp$

\pperp $ightarrow p_{\perp}$

\dvl ightarrow dl

\mufac $ightarrow rac{\mu_0}{4\pi}$

ackslash Ampère ightarrow Ampère

\thetahat $ightarrow \hat{ heta}$

\EMF $ightarrow \mathcal{E}$

 $\vert_{ extstyle VM}
ightarrow extstyle e$

 $\hspace{1cm} \hspace{1cm} \hspace{1cm} \to \hspace{1cm} \mathbf{m}$

 \slash smallprime \to ,

 $\verb|\crossp[2]| \qquad \rightarrow \quad \#1 \times \#2$

 $\dotp[2]$ \rightarrow $\#1\cdot\#2$

\curfac $ightarrow 4\pi c$

\rdif $ightarrow ec{r} - r'$

ullet bigsp ullet

\del ightarrow
abla

 $\verb|\deldot[1]| \qquad \to \quad \nabla{\cdot}\#1$

\emf $ightarrow \mathcal{E}$

\invc $\rightarrow \frac{1}{c}$

 $\verb|\pderiv[2]| \qquad \qquad \to \quad \tfrac{\partial \#1}{\partial \#2}$

\sderiv[2] $\rightarrow \frac{d^2 \# 1}{d \# 2^2}$

 $\label{eq:deriv2} \verb+ deriv[2] \qquad \qquad \rightarrow \quad \frac{d\#1}{d\#2}$

\dldt $ightarrow rac{dI}{dt}$

\dline $ightarrow d\vec{s}$

 $\setminus \texttt{Eofx} \qquad \qquad \to \quad \mathbf{E}(\mathbf{x})$

 $\verb|\Eofxprime| \rightarrow \mathbf{E}(\mathbf{x}')$

 $\verb|\rhoofx| \qquad \rightarrow \quad \rho(\mathbf{x})$

 $\verb|\rhoofxprime| \qquad \to \ \rho(\mathbf{x}')$

 $\verb|\xminusxprime| \rightarrow x - x'$

\oneoverxminusxprime $ightarrow rac{1}{|\mathbf{x}-\mathbf{x}'|}$

 $\verb|\oneover[1]| \longrightarrow \#1$