

Some Useful Math Macros

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These are some useful short forms for math, which occur repeatedly. The macros are defined in `operands.tex`.

Short form	Appears as	Description
<code>\Vector{A}</code>	A	Bold face for vectors
<code>\Tensor{A}</code>	A	Bold face, Sans-Serif font for tensors
<code>\$\rmd\$</code>	d	Roman dee.
<code>\der{A}{t}</code>	$\frac{dA}{dt}$	Derivative
<code>\pder{A}{t}</code>	$\frac{\partial A}{\partial t}$	Partial Derivative
<code>\DDt{A}</code>	$\frac{D A}{D t}$	Material/Total Derivative
<code>\textder{A}{x}</code>	dA/dx	Derivative in running text
<code>\Int{0}{\infty}{x}</code>	$\int_0^{\infty} dx$	Integral with limits and differential
<code>2.3\tenpow{-3}</code>	$2.3\text{E-}3$	Scientific Notation of 2.3×10^{-3}
<code>\Exp{-t}</code>	e^{-t}	Raised exponential
<code>\OrderOf{\epsilon}</code>	$\mathcal{O}(\epsilon)$	Order Of
<code>\modulus{A}</code>	$ A $	Magnitude or Determinant
<code>\braket{A}</code>	$\langle A \rangle$	Ensemble Average or bra and ket operators
<code>\sqfrac{A}{t}</code>	$\sqrt{\frac{A}{t}}$	Square root of a fraction
<code>\evalat{A}{t=0}</code>	$A _{t=0}$	Evaluate A at $t = 0$
<code>\crossV</code>	∇	V-cross to denote volume