- $:\left(10^{2^2}\right)$

```
\pr{10^{2^2}} % pr{expression}: places parantheses around the
    expression
```

- $:\langle u, v \rangle$

```
\inn{u,v} % inn: used for inner product
```

- $:\int_0^1 dx = x\Big|_0^1 = 1$

```
\int_0^1dx = x\on{1}{0} = 1 % on: used at the end of integral to
    indicate the difference of an expression on two values
```

- $:x \in \mathbb{R}, n \in \mathbb{N}, t \in \mathbb{Z}^+, u \in \mathbb{Z}, y \in \mathbb{R}^+$

```
x \in \R, n \in \N, t \in \Zp, u \in \Z, y \in \Rp % \R, \N, \Zp, \
    Z, \Rp: set of real numbers, natural numbers, positive integers,
    integers and positive real numbers respectively.
```

- $:\mathbb{E}[x]$

```
\E[x] % \E: expected value
```

- $:xyzt + \overline{xyzt} = 2\mathrm{Re}(xyzt)$

```
xyzt + \conj{xyzt} = 2\mathrm{Re}(xyzt) % \conj{a}: shows conjucate
    of a
```

- $:\dfrac{\partial f}{\partial x} = \dfrac{\partial g}{\partial y} = \cancelto{0}{\dfrac{\partial}{\partial z}(z)}$

```
\rond{f}{x} = \rond{g}{y} = \cancelto{0}{\rond{}{z}(z)} % \rond{a}{
    b}: partial derivative of a wrt b
```