

```
In[1]:= Needs["RG`Notation`"]
```

setIndexed

```
In[2]:= ? setIndexed
```

setIndexed[x] set symbol x as indexed variable,
i.e. x[i], x[i, j] will have sub- and superscripts in Traditional form

```
In[3]:= setIndexed[x]
```

```
In[4]:= x[i]
```

```
Out[4]= x[i]
```

```
In[5]:= x[i] // TraditionalForm
```

```
Out[5]//TraditionalForm=
```

$$x_i$$

```
In[6]:= x[i] // TeXForm
```

```
Out[6]//TeXForm=
```

$$x_i$$

```
In[7]:= x[i, j] // TraditionalForm
```

```
Out[7]//TraditionalForm=
```

$$x_i^j$$

```
In[8]:= Clear[x]
```

setPrime

```
In[9]:= ? setPrime
```

setPrime[x] set symbol prime`x in traditional form to have prime (') as superscript

```
In[10]:= setPrime[x]
```

```
In[11]:= prime`x // TraditionalForm
```

```
Out[11]//TraditionalForm=
```

$$x'$$

```
In[12]:= prime`x // TeXForm
```

```
Out[12]//TeXForm=
```

$$x'$$

```
In[13]:= setIndexed[prime`x]
```

```
In[14]:= prime`x[1] // TraditionalForm
Out[14]//TraditionalForm=

$$x'_1$$


In[15]:= prime`x[1] // TeXForm
Out[15]//TeXForm=

$$x'_1$$


In[16]:= Clear[prime`x]; Remove[prime`x]
```

setBar

```
In[17]:= ? setBar
```

```
setBar[x] set symbol bar`x in traditional form to have overbar
```

```
In[18]:= setBar[x]

In[19]:= bar`x // TraditionalForm
Out[19]//TraditionalForm=

$$\overline{x}$$


In[20]:= bar`x // TeXForm
Out[20]//TeXForm=

$$\bar{x}$$


In[21]:= Export["/tmp/barx.tex", bar`x // TraditionalForm]
Out[21]= /tmp/barx.tex

In[22]:= Run["pdflatex", "-output-directory=/tmp", "/tmp/barx.tex"]
Out[22]= 0

In[23]:= Clear[bar`x]; Remove[bar`x]
```

matrixElement

```
In[24]:= matrixElement["annihilation"] // TraditionalForm
Out[24]//TraditionalForm=

$$\mathcal{M}_{\text{annihilation}}$$


In[25]:= matrixElement["annihilation"] // TeXForm
Out[25]//TeXForm=

$$\mathcal{M}_{\text{annihilation}}$$

```

UnderBar

UnderBar is shortcut for HoldForm

In[26]:= $1 + 2 + \underline{a + b}$

Out[26]= $3 + (a + b)$

In[27]:= Needs["RG`Presentation`"]

In[28]:= $1 + 2 + \underline{a + b} + (\underline{a + b})^2 + \underline{(c + d)^4} // \text{colorize}[_\text{HoldForm}]$

Out[28]= $3 + (a + b) + (a + b)^2 + (c + d)^4$