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Examples of Twiki Latex via MathModePlugin

In order to activate the MathModePlugin:

first **disable** the LatexModePlugin

- Set DISABLEDPLUGINS = LatexModePlugin

then set the font size to *footnotesize* in order it would be equal to that of non-latex:

- Set LATEXFONTSIZE = footnotesize

e.g. by adding the following code to the top of your page:

```
  * Set DISABLEDPLUGINS = LatexModePlugin
  * Set LATEXFONTSIZE = footnotesize
```

Example 1: `%$ ... $%` and `<latex>` inline

input:

```
asdasd %$ x $% asdasd <latex> x  y</latex> asd
```

output:

asdasd x asdasd xy asd

Example 2: `%\[ ... \]%` inline

input:

```
asd %\[ a_i = b^c \]% asda
```

output (note: the result is in own-line and centered):

asd

$$a_i = b^c$$

asda

Example 3: this does not work

input:

```
%\[ \
 a_i = b^3 \
\]% asda
```

output:

%\[a_i = b^3 \]% asda

Example 4 : same as ex.2

input:

```
asd
%\[  a_i = b^4 \]% asda
```

output:

asd

$$a_i = b^4$$

asda

Example 5: latex tag inline (same as ex.1)

input:

```
latex tag <latex> k_m </latex>
```

output:

latex tag k_m

Example 6: latex tag split into few lines

input:

```
<latex>
k_n
\ k^5
</latex>
```

output:

$k_n \ k^5$

Example 7: latex tag centered

input:

```
<center>
<latex>
k_n  = k^5
</latex>
</center>
```

output:

$$k_n = k^5$$

Example 8: a longer formula

input:

```
<center>
<latex>

        G(x; \mu, \sigma) = \frac{1}{\sqrt{2\pi}\sigma}\exp\left[-\frac{(x-\mu)^
2}{2\sigma^2}\right]

</latex>
</center>
```

output:

$$G(x; \mu, \sigma) = \frac{1}{\sqrt{2\pi}\sigma} \exp\left[-\frac{(x-\mu)^2}{2\sigma^2}\right]$$

Example 9: array / text inside

input:

```
<center><latex>

 \text{ text before array}
 \begin{array}{lr}
   \mu_1 = 0 & (3a) \text{ text in array} \\
   \mu_2  = -\mu'_1{}^2 + \mu'_2 & (3b)  \\
   \mu_3  = 2 \mu'_1{}^3 - 3 \mu'_1 \mu'_2 + \mu'_3 & (3c)  \\
   \mu_4  = -3 \mu'_1{}^4 + 6 \mu'_1{}^2 \mu'_2 - 4 \mu'_1 \mu'_3 + \mu'_4 &(3d)
 \end{array}

</latex></center>
```

output:

$$\text{ text before array} \begin{array}{lr} \mu_1 = 0 & (3a) \text{ text in array} \\ \mu_2 = -\mu_1'^2 + \mu_2' & (3b) \\ \mu_3 = 2\mu_1'^3 - 3\mu_1'\mu_2' + \mu_3' & (3c) \\ \mu_4 = -3\mu_1'^4 + 6\mu_1'^2\mu_2' - 4\mu_1'\mu_3' + \mu_4' & (3d) \end{array}$$

Example 10: matrix via array

input:

```
<center><latex>

\mathbf{X} = \left(
\begin{array}{ccc}
x_1 & x_2 & \ldots \\
x_3 & x_4 & \ldots \\
\vdots & \vdots & \ddots
\end{array} \right)

</latex></center>
```

output:

$$\mathbf{X} = \left(\begin{array}{ccc} x_1 & x_2 & \ldots \\ x_3 & x_4 & \ldots \\ \vdots & \vdots & \ddots \end{array} \right)$$

Example 11: operations with matrices via arrayS

input:

```
<center><latex>

\left( \begin{array}{cc} a_{11} & a_{12} \\ a_{21}  & a_{22} \end{array} \right)
\cdot
\left( \begin{array}{c} x\\y \end{array} \right)
= \left( \begin{array}{c} C\\D \end{array} \right)

</latex></center>
```

output:

$$\left(\begin{array}{cc} a_{11} & a_{12} \\ a_{21} & a_{22} \end{array} \right) \cdot \left(\begin{array}{c} x \\ y \end{array} \right) = \left(\begin{array}{c} C \\ D \end{array} \right)$$

Example 12: matrices w/o arrayS

input:

```
<center><latex>

\left(
 \begin{matrix}
1 & 2 \\
3 & 4
\end{matrix}
\right) =\qquad
\begin{bmatrix}
1 & 2 & 3 \\
4 & 5 & 6 \\
7 & 8 & 9
\end{bmatrix}

</latex></center>
```

output:

$$\begin{pmatrix} 1 & 2 \\ 3 & 4 \end{pmatrix} = \qquad \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$$

Example13: under/over braces

input:

```
<center><latex>

\underbrace{\overbrace{a+b+c}^6
\cdot \overbrace{d+e+f}^9}
_\text{meaning of life} = 42

</latex></center>
```

output:

$$\underbrace{\overbrace{a+b+c}^{6}\cdot\overbrace{d+e+f}^{9}}_{\text{meaning of life}} = 42$$

Example 14: setting color

input:

```
<center><latex>
\color{red}
\underbrace{\overbrace{a+b+c}^6
\cdot \overbrace{d+e+f}^9}
_\text{meaning of life} = 42

</latex></center>
```

output:

$$\underbrace{\overbrace{a+b+c}^{6}\cdot\overbrace{d+e+f}^{9}}_{\text{meaning of life}} = 42$$

This topic: Main > AVFedotovHowToTwikiLatexViaMathModePlugin
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