

# On Maxima use in $\text{T}_{\text{E}}\text{X}_{\text{MACS}}$

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## 1 Using formulas

This is a normal formula:

$$\oint E dx = \mathbb{R}.$$

## 2 Octave session

```
octave> a=[1;2;3;4]
```

```
octave> a+a
```

$$\begin{pmatrix} 2 \\ 4 \\ 6 \\ 8 \end{pmatrix}$$

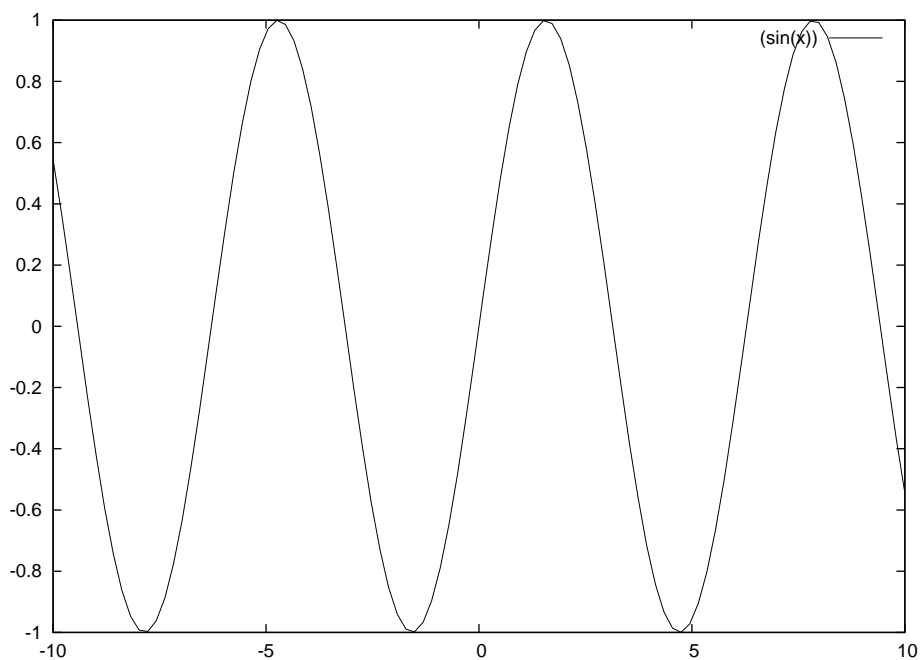
```
octave> a
```

```
octave>
```

## 3 Gnuplot

This is a TeXmacs interface for GNUplot.

```
GNUplot] plot(sin(x))
```



GNUplot]

## 4 My first Maxima session

This is a plain text. And an inline formulat:  $1 + x + x^2 + \dots + x^{n-1} = \frac{1-x^n}{1-x}$ .

(%i1) `integrate(f(x),x);`

(%o1)  $\int f(x) dx$

(%i2) `diff(1/(1+x*exp(-x)),x,2);`

(%o2)  $\frac{2(e^{-x} - x e^{-x})^2}{(x e^{-x} + 1)^3} - \frac{x e^{-x} - 2 e^{-x}}{(x e^{-x} + 1)^2}$

(%i3)