$$\text{maple}\left(\sqrt{-1}\right) = i$$

$$\text{maple}\left(\arcsin\left(1\right)\right) = \frac{\pi}{2}$$

$$\text{maple}\left(\sin\left(\frac{\pi}{2}\right)\right) = 1$$

$$\text{maple}\left(\text{simplify}\left(e^{i\cdot\pi}\right)\right) = -1$$

$$f\left(x, y\right) := \frac{x}{y}$$

$$\text{maple}\left(\text{numer}\left(f\left(x, y\right)\right)\right) = x$$

$$\text{maple}\left(\text{denom}\left(f\left(x, y\right)\right)\right) = y$$

$$\text{maple}\left(\text{limit}\left(\sin\left(x\right)^{2}, x = \frac{\pi}{2}\right)\right) = 1$$

$$\text{maple}\left(\text{limit}\left(\frac{\sin\left(x\right)}{x}, x = 0\right)\right) = 1$$

$$\text{maple}\left(\text{limit}\left(\exp\left(x\right), x = \text{infinity}\right)\right) = \text{infinity}$$

$$\text{maple}\left(\text{limit}\left(\frac{1}{x}, x = 0, \text{real}\right)\right) = \text{undefined}$$

$$\text{maple}\left(\text{series}\left(\frac{18\cdot z}{z^{2} - \frac{1}{5}\cdot z - \frac{4}{5}}, z = \text{infinity}, 3\right)\right) = \frac{18\cdot\left(1 + 5\cdot z\right) + 5\cdot O\left(\frac{1}{z^{3}}\right)\cdot z^{2}}{5\cdot z^{2}}$$

$$\text{maple}\left(\text{convert}\left(\text{series}\left(\frac{\sin\left(x\right)}{x}, x, 8\right), \text{polynom}\right)\right) = \frac{42\cdot\left(20\cdot\left(6 - x^{2}\right) + x^{4}\right) - x^{6}}{5040}$$

$$\text{maple}\left(\text{solve}\left(x^{\frac{3}{2}} = 3, x\right)\right) = 3^{\frac{2}{3}}$$

$$\text{maple}\left(\text{solve}\left(\sqrt{\ln\left(x\right)} = 2, x\right)\right) = \exp\left(4\right)$$

$$\text{maple}\left(\text{evalf}\left(\text{solve}\left(\sqrt{\ln\left(x\right)} = 2, x\right)\right)\right) = \frac{5459815003}{100000000}$$

$$\text{maple}\left(\text{d}\left(x^{3}\right)\right) = 3\cdot x^{2}$$

$$\left(d\,x \right)$$

$$\mathrm{maple}\left(\mathrm{parse}\left(\text{"1"} \right), \mathrm{statement} \right) = 1$$

$$\mathrm{maple}\left(\mathrm{parse}\left(\text{"sin(x)"} \right), \mathrm{statement} \right) = \sin\left(x \right)$$

$$\mathrm{maple}\left(\mathrm{parse}\left(\text{"int(x^2,x)"} \right), \mathrm{statement} \right) = \frac{x^3}{3}$$

$$\mathrm{maple}\left(\int x^2 \, d\,x \right) = \frac{x^3}{3}$$

$$\mathrm{maple}\left(\int \ln\left(x \right)^3 \, d\,x \right) = x \cdot \left(-6 + \ln\left(x \right) \cdot \left(6 + \ln\left(x \right) \cdot \left(-3 + \ln\left(x \right) \right) \right) \right)$$

$$\mathrm{maple}\left(\mathrm{factor}\left(a^2 - 2 \cdot a \cdot b + b^2 \right) \right) = \left(a - b \right)^2$$

$$\mathrm{maple}\left(\mathrm{expand}\left(\left(x - 1 \right) \cdot \left(x - 2 \right) \cdot \left(x - 3 \right) \right) \right) = \left(-1 + x \right) \cdot \left(-2 + x \right) \cdot \left(-3 + x \right)$$

$$\mathrm{maple}\left(\mathrm{sum}\left(-\exp\left(-k \right), k \right) \right) = \frac{\exp\left(1 \right)}{\left(-1 + \exp\left(1 \right) \right) \cdot \exp\left(k \right)}$$

$$\mathrm{maple}\left(\mathrm{sum}\left(k^2, k \right) \right) = \frac{k \cdot \left(1 + k \cdot \left(-3 + 2 \cdot k \right) \right)}{6}$$

$$\mathrm{maple}\left(\int \frac{x^4}{\left(1 - x^2 \right)^{\frac{5}{2}}} \, d\,x \right) = \frac{x \cdot \left(x^2 - 3 \cdot \left(1 - x^2 \right) \right) + 3 \cdot \arcsin\left(x \right) \cdot \left(1 - x^2 \right)^{\frac{3}{2}}}{3 \cdot \left(1 - x^2 \right)^{\frac{3}{2}}}$$

$$\mathrm{maple}\left(\mathrm{limit}\left(\frac{\sin\left(x \right)}{x}, x = 0 \right) \right) = 1$$

$$\mathrm{maple}\left(\frac{d}{d\,x} \left(\frac{\sin\left(x \right)^2}{x} \right) \right) = \frac{\sin\left(x \right) \cdot \left(2 \cdot x \cdot \cos\left(x \right) - \sin\left(x \right) \right)}{x^2}$$

$$\mathrm{maple}\left(\mathrm{limit}\left(\mathrm{tg}\left(x \right)^2, x = \frac{\pi}{3} \right) \right) = 3$$

$$\mathrm{maple}\left(\mathrm{solve}\left(f = m \cdot a, a \right) \right) = \frac{f}{m}$$

$$\left(\left(2 \right) \right) \left(\frac{2}{\sqrt{a}} \right)$$

$$\text{maple}\left(\ \text{solve}\left(\ a\cdot x^{2}=1\ ,\ x\right)\right)=\begin{pmatrix}-\frac{2}{\sqrt{a}}\end{pmatrix}$$

$$\text{maple}\left(\ \text{solve}\left(\ 3\cdot x^{2}-7\cdot x+4=0\ ,\ x\right)\right)=\begin{pmatrix}1\\ \frac{4}{3}\end{pmatrix}$$

$$\text{maple}\left(\ \text{solve}\left(\ 5^{x+1.5}=7^{2\cdot x}\ ,\ x\right)\right)=-\frac{3\cdot\ln\left(5\right)}{2\cdot\ln\left(\frac{5}{49}\right)}$$

$$\text{maple}\left(\ \text{solve}\left(\ 3\cdot x^{3}+13\cdot x^{2}-10\cdot x=0\ ,\ x\right)\right)=\begin{pmatrix}0\\ -5\\ \frac{2}{3}\end{pmatrix}$$

$$\text{Res}:=\text{maple}\left(\ \text{solve}\left(\ \begin{cases}\text{I11}\cdot\left(\text{R0}+\text{R1}+p\cdot L+\frac{1}{p\cdot C}\right)-\text{I22}\cdot\frac{1}{p\cdot C}=\frac{\text{Uco}}{p}+L\cdot\text{ILo}\\ \text{I11}\cdot\frac{-1}{p\cdot C}+\text{I22}\cdot\left(\frac{1}{p\cdot C}+\text{R2}\right)=\frac{\text{Em}}{p}-\frac{\text{Uco}}{p}\end{cases}\ ,\ \begin{Bmatrix}\text{I11}\\ \text{I22}\end{Bmatrix}\right)\right)$$

$$\text{I11}:=\text{Res}_{1}\qquad\text{I22}:=\text{Res}_{2}$$

$$\text{Ic}\left(p\right):=\text{maple}\left(\ \text{collect}\left(\ \text{simplify}\left(\ \text{I22}-\text{I11}\ \right)\ ,\ p\right)\right)$$

$$\text{Ic}\left(p\right)=-\frac{C\cdot\left(L\cdot\left(-\text{Em}+\text{Uco}+\text{ILo}\cdot\text{R2}\right)\cdot p-\text{Em}\cdot\left(\text{R0}+\text{R1}\right)+\text{Uco}\cdot\left(\text{R0}+\text{R1}+\text{R2}\right)\right)}{\text{R0}+\text{R1}+\text{R2}\cdot\left(1+p^{2}\cdot L\cdot C\right)+\left(L+C\cdot\text{R2}\cdot\left(\text{R0}+\text{R1}\right)\right)\cdot p}$$

$$f\left(x\ ,\ y\right):=\sin\left(x\right)\cdot\sin\left(y\right)$$

$$\text{maple}\left(\ \text{whattype}\left(\ \text{op}\left(1\ ,\ f\left(x\ ,\ y\right)\right)\right)\right)=\text{function}$$

$$\text{maple}\left(\ \text{op}\left(1\ ,\ f\left(x\ ,\ y\right)\right)\right)=\sin\left(x\right)$$

$$\text{maple}\left(\ \text{op}\left(2\ ,\ f\left(x\ ,\ y\right)\right)\right)=\sin\left(y\right)$$

$$\text{maple}\left(\ \text{map}\left(\text{"+"}\ ,\ x\ ,\ y\ ,\ z\right)\right)=\text{"+"}\left(x\ ,\ y\ ,\ z\right)$$

$$\text{maple}\left(\ \text{map}\left(\text{"*"}\ ,\ x\ ,\ y\ ,\ z\right)\right)=\text{"*"}\left(x\ ,\ y\ ,\ z\right)$$

$$\text{maple}\left(\ \text{implicitdiff}\left(\ x^{2}+3\cdot y\cdot x+y^{3}\ ,\ y\ ,\ x\right)\right)=-\frac{2\cdot x+3\cdot y}{3\cdot\left(x+y^{2}\right)}$$

$$\mathrm{maple}\left(\int \frac{1}{1+x^4}\,dx\right)=\frac{\sqrt{2}\cdot\left(2\cdot\left(\arctan\left(1+x\cdot\sqrt{2}\right)+\arctan\left(-1+x\cdot\sqrt{2}\right)\right)+\ln\left(\frac{1+x\cdot\left(x+\sqrt{2}\right)}{1+x\cdot\left(x-\sqrt{2}\right)}\right)\right)}{8}$$

$$\mathrm{maple}\left(\int_0^{\pi} \sin(x)^2\,dx\right)=1.5708$$

$$\mathrm{maple}\left(\int \sin(x)^2\,dx\right)=\frac{x-\cos(x)\cdot\sin(x)}{2}$$