

```
(%i1) m: entermatrix (4,4);
```

*Isthematrix1.Diagonal2.Symmetric3.Antisymmetric4.GeneralAnswer1, 2, 3or4 :*  
4; Row1Column1 : cos(0); Row1Column2 : (1/2) \* cos(

$$(\%o1) \begin{pmatrix} 1 & \frac{1}{2^{\frac{3}{2}}} & 0 & -\frac{1}{2^{\frac{7}{2}}} \\ 0 & \frac{1}{2^{\frac{3}{2}}} & \frac{1}{4} & \frac{1}{2^{\frac{7}{2}}} \\ 1 & \frac{1}{4\sqrt{5}} & \frac{\cos(2\operatorname{atan}(2))}{16} & \frac{\cos(3\operatorname{atan}(2))}{64} \\ 0 & \frac{1}{2\sqrt{5}} & \frac{\sin(2\operatorname{atan}(2))}{16} & \frac{\sin(3\operatorname{atan}(2))}{64} \end{pmatrix}$$

```
(%i2) load(vect);
```

```
(%o2) /usr/share/maxima/5.34.1/share/vector/vect.mac
```

```
(%i19) load(eigen);
```

```
(%o19) /usr/share/maxima/5.34.1/share/matrix/eigen.mac
```

```
(%i21) output: [0, 1, 0, 1];
```

```
(%o21) [0, 1, 0, 1]
```

```
(%i4) numer:true;
```

```
(%o4) true
```

```
(%i10) n: invert(expand(m));
```

$$(\%o10) \begin{pmatrix} 0.327137341618475 & 0.3973041925577348 & 0.6728626583815251 & -1.48187396900253 \\ -2.194917176918339 & -1.52066960391493 & 2.194917176918339 & 9.249535902263405 \\ 8.899613913293262 & 6.711886385259095 & -8.899613913293262 & -20.23414236126541 \\ -16.3922406844539 & -1.587694595636999 & 16.3922406844539 & 20.23265349152542 \end{pmatrix}$$

```
(%i22) n.output;
```

$$(\%o22) \begin{pmatrix} -1.084569776444795 \\ 7.728866298348475 \\ -13.52225597600631 \\ 18.64495889588842 \end{pmatrix}$$