```
> restart
> Ecua := y" + 9·y = 0
```

$$Ecua := \frac{d^2}{dx^2} y(x) + 9\,y(x) = 0 \quad (1)$$

```
> SolGral := dsolve(Ecua)
```

$$SolGral := y(x) = c_1 \sin(3\,x) + c_2 \cos(3\,x) \quad (2)$$

```
> yy[1] := cos(3·x)
```

$$yy_1 := \cos(3\,x) \quad (3)$$

```
> yy[2] := sin(3·x)
```

$$yy_2 := \sin(3\,x) \quad (4)$$

```
> with(linalg)
```

[*BlockDiagonal*, *GramSchmidt*, *JordanBlock*, *LUdecomp*, *QRdecomp*, *Wronskian*, *addcol*, *addrow*, *adj*, *adjoint*, *angle*, *augment*, *backsub*, *band*, *basis*, *bezout*, *blockmatrix*, *charmat*, *charpoly*, *cholesky*, *col*, *coldim*, *colspace*, *colspan*, *companion*, *concat*, *cond*, *copyinto*, *crossprod*, *curl*, *definite*, *delcols*, *delrows*, *det*, *diag*, *diverge*, *dotprod*, *eigenvals*, *eigenvalues*, *eigenvectors*, *eigenvects*, *entermatrix*, *equal*, *exponential*, *extend*, *ffgausselim*, *fibonacci*, *forwardsub*, *frobenius*, *gausselim*, *gaussjord*, *geneqns*, *genmatrix*, *grad*, *hadamard*, *hermite*, *hessian*, *hilbert*, *htranspose*, *ihermite*, *indexfunc*, *innerprod*, *intbasis*, *inverse*, *ismith*, *issimilar*, *iszero*, *jacobian*, *jordan*, *kernel*, *laplacian*, *leastsqrs*, *linsolve*, *matadd*, *matrix*, *minor*, *minpoly*, *mulcol*, *mulrow*, *multiply*, *norm*, *normalize*, *nullspace*, *orthog*, *permanent*, *pivot*, *potential*, *randmatrix*, *randvector*, *rank*, *ratform*, *row*, *rowdim*, *rowspace*, *rowspan*, *rref*, *scalarmul*, *singularvals*, *smith*, *stackmatrix*, *submatrix*, *subvector*, *sumbasis*, *swapcol*, *swaprow*, *sylvester*, *toeplitz*, *trace*, *transpose*, *vandermonde*, *vecpotent*, *vectdim*, *vector*, *wronskian*] (5)

```
> WW := wronskian([yy[1], yy[2]], x)
```

$$WW := \begin{bmatrix} \cos(3\,x) & \sin(3\,x) \\ -3\sin(3\,x) & 3\cos(3\,x) \end{bmatrix} \quad (6)$$

```
> Comprobar := simplify(det(WW)) ≠ 0
```

$$Comprobar := 3 \neq 0 \quad (7)$$

```
>
```