

```

> pol:=x^4+x^3-x^2-x;          pol:= x4 + x3 - x2 - x
=
> whattype(pol);              `+`
=
> nops(pol);                   4
=
> op(pol);                     x4, x3, -x2, -x
=
> op(1,pol);                   x4
=
> subs(x=0, cos(x)*(sin(x)+x^2+1));
                                cos(0) (sin(0) + 1)
=
> eval(%);                      1
=
> subs(x=y, y=z, x*y^2);       z3
=
> subs({x=y, y=z}, x*y^2);     yz2
=
> subs(x*y=product, x*y*z);    xyz
=
> algsubs(x*y=product, x*y*z); z product
=
> subsop(3=y, x^2+x+1/x);      x2 + x + y
=
> vyraz:=(x^2+2*x+1)^2+(x^2-2*x+1)^2;
                                vyraz:= (x2 + 2 x + 1)2 + (x2 - 2 x + 1)2
=
> map(factor, vyraz);
                                (x + 1)4 + (x - 1)4

```

```
(%i1) pol:x^4+x^3-x^2-x;
(%o1)  $x^4 + x^3 - x^2 - x$ 

(%i2) op(pol);
(%o2) +

(%i3) nterms(pol);
(%o3) 4

(%i5) args(pol);
(%o5) [ $x^4$ ,  $x^3$ ,  $-x^2$ ,  $-x$ ]

(%i6) part(pol,1);
(%o6)  $x^4$ 

(%i7) subst(x=0, cos(x)*(sin(x)+x^2+1));
(%o7) 1

(%i8) subst([x=y, y=z], x*y^2);
(%o8)  $z^3$ 

(%i9) psubst([x=y, y=z], x*y^2);
(%o9)  $y z^2$ 

(%i11) subst(x*y=product, x*y*z);
(%o11)  $x y z$ 

(%i13) ratsubst(product, x*y, x*y*z);
(%o13) product z

(%i14) substpart(y, x^2+x+1/x, 3);
(%o14)  $y + x^2 + x$ 

(%i15) vyraz:(x^2+2*x+1)^2+(x^2-2*x+1)^2;
(%o15)  $(x^2 + 2x + 1)^2 + (x^2 - 2x + 1)^2$ 

(%i16) map(factor, vyraz);
(%o16)  $(x + 1)^4 + (x - 1)^4$ 
```