

```
*****
Die Typen
*****
(1+3*i)^6
```

```
r=1111111/33333331
```

```
r+.0
```

```
r*mod(1,7)
```

```
r+0(7^30)
```

```
s=r*mod(1,x^3+x+1)
```

```
(s+mod(x,x^3+x+1))^-3
```

```
pol=x^7+x^5+x^3+2
```

```
rpol=pol*mod(1,13)
```

```
rpol=rpol^3
```

```
lift(rpol)
```

```
factor(rpol)
```

```
bern=x/(exp(x)-1)
```

```
coeff(bern,10)*10!
```

```
bz=vector(12,n,coeff(bern,n)*n!)
```

```
*****
Funktions-Definitionen,
Programm-Schritte, eingebaute Funktionen
*****
```

```
bp(n)=if(n>0,n*integ(bp(n-1),x)+bz[n],1)
```

```
for(n=0,10,print(n," : ",bp(n)))
```

```
f(x)=x^3+x+1
```

```
anz(p)=p+1+sum(0,x=0,p-1,kro(f(x),p))
```

```
forprime(p=1,100,print(p,":",anz(p)))
```

```
D=5;while(classno(D)<>4,until(issqfree(D),D=D+4));print(D)
```

```
-----> D=5;while(classno(D)<>6,until(issqfree(D), D=D+4));print(D)
        697
```

```
time = 1mn, 9,960 ms
```

```
algdep(sqrt(5),3)
```

```
pol=algdep(pi,2)
```

```
subst(pol,x,pi)
```

```
*****
Programm-Pakete
*****
```