MAGMA
COMPUTER • ALGEBRA

Magma Calculator

Enter your code in the box below. Click on "Submit" to have it evaluated by Magma.

```
PolQ<X>:=PolynomialRing(Rationals());
K<v>:=NumberField(X^3+2*X^2-X+1);
"Degree of K =",Degree(K);
"v^13 = ",v^13;
"1/(v^2-v+1) =",1/(v^2+v+1);
"Basis of K/Q", Basis(K);
```

Clear   Submit

```
Degree of K = 3
v^13 =  -22929*v^2 + 12538*v - 9003
1/(v^2-v+1) = 1/3*(-v^2 - 2*v + 2)
Basis of K/Q [
    1,
    v,
    v^2
]
```

Calculations are restricted to 120 seconds.

Input is limited to 50000 bytes.

Running Magma V2.21-8.

Seed: 4229006867; Total time: 0.170 seconds; Total memory usage: 32.09MB.

Magma is maintained and distributed by the Computational Algebra Group, School of Mathematics and Statistics, University of Sydney.
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