```
>> // Borwein kvadratikus algoritmusa
>>
>> N:=6:
>> DIGITS:=500:
>>
>> a:=sqrt(2): b:=0: p:=2+sqrt(2):
>> for i from 1 to N do
&>  uj_a:=(sqrt(a)+1/sqrt(a))/2:
&>  uj_b:=(sqrt(a)*(1+b))/(a+b):
&>  uj_p:=p*uj_b*(1+uj_a)/(1+uj_b):
&>  a:=uj_a:
&>  b:=uj_b:
&>  p:=uj_p:
&>
&>  elteres:=float(p-PI):
&>  tizedesjegy_pontossag:=trunc(abs(trunc(log(10,elteres)))):
&>  print(Unquoted, "Eltérés: ".
&>   expr2text(tizedesjegy_pontossag).
&>   " tizedesjegy."):
&>  end_for;

                           Eltérés: 2 tizedesjegy.

                           Eltérés: 8 tizedesjegy.

                          Eltérés: 18 tizedesjegy.

                          Eltérés: 40 tizedesjegy.

                          Eltérés: 83 tizedesjegy.

                          Eltérés: 170 tizedesjegy.

real  0m22.197s
user  0m21.770s
sys   0m0.370s
```

```
>> // Borwein kvartikus algoritmusa
>>
>> N:=5:
>> DIGITS:=1000:
>>
>> a:=6-4*sqrt(2): y:=sqrt(2)-1:
>> for i from 0 to N-1 do
&>  uj_y:=(1-(1-y^4)^(1/4))/(1+(1-y^4)^(1/4)):
&>  uj_a:=a*((1+uj_y)^4)-2^(2*i+3)*uj_y*(1+uj_y+uj_y^2):
&>  y:=uj_y:
&>  a:=uj_a:
&>  p:=1/a:
&>
&>  elteres:=float(p-PI):
&>  tizedesjegy_pontossag:=trunc(abs(trunc(log(10,elteres)))):
&>  print(Unquoted, "Eltérés: ".
&>   expr2text(tizedesjegy_pontossag).
&>   " tizedesjegy."):
&>  end_for;

                           Eltérés: 8 tizedesjegy.

                          Eltérés: 40 tizedesjegy.

                          Eltérés: 170 tizedesjegy.

                          Eltérés: 693 tizedesjegy.

                          Eltérés: 997 tizedesjegy.

real  0m34.248s
user  0m33.830s
sys   0m0.310s
```

```
>> // Ooura kvadratikus algoritmusa a PI kiszámítására.
>> // A módszer a Gauss-Legendre-féle számtani-mértani közép (AGM) gyorsított
>> // változata; az eredeti programban a szorzásokat gyors
>> // Fourier-transzformációval (FFT) végzik (ami további gyorsítás).
>> // Copyright (C) 1999 Takuya Ooura <ooura@mmm.t.u-tokyo.ac.jp>
>> // http://momonga.t.u-tokyo.ac.jp/~ooura/fft.html
>>
>> DIGITS:=1000:                              // Itt kell megadni a pontosságot.
>> ELTERES:=10^(-DIGITS):                     //
>> SQRT_SQRT_ELTERES:=sqrt(sqrt(ELTERES)):    //
>> n:=1:                                      //
>>
>>     c := sqrt(0.125):
>>     a := 1 + 3 * c:
>>     b := sqrt(a):
>>     e := b - 0.625:
>>     b := 2 * b:
>>     c := e - c:
>>     a := a + e:
>>     npow := 4:
>>     while e > SQRT_SQRT_ELTERES do
&>         npow := 2 * npow:
&>         e := (a + b) / 2:
&>         b := sqrt(a * b):
&>         e := e - b:
&>         b := 2 * b:
&>         c := c - e:
&>         a := e + b:
&>    n := n + 1:                             //
&>    end_while:
>>     e := e * e / 4:
>>     a := a + b:
>>     p := (a * a - e - e / 2) / (a * c - e) / npow:
>>
>> float(PI);                                 //

3.141592653589793238462643383279502884197169399375105820974944592307816406\
28620899862803482534211706798214808651328230664709384460955058223172535940\
81284811174502841027019385211055596446229489549303819644288109756659334461\
28475648233786783165271201909145648566923460348610454326648213393607260249\
14127372458700660631558817488152092096282925409171536436789259036001133053\
05488204665213841469519415116094330572703657595919530921861173819326117931\
05118548074462379962749567351885752724891227938183011949129833673362440656\
..........................................................................

>> print(Unquoted, "Eltérés: ".               //
&>  expr2text(float(p-PI)));                  //

Eltérés: 0.000000000000000000000000000000000000000000000000000000000000000\
00000000000000000000000000000000000000000000000000000000000000000000000000\
00000000000000000000000000000000000000000000000000000000000000000000000000\
00000000000000000000000000000000000000000000000000000000000000000000000000\
00000000000000000000000000000000000000000000000000000000000000000000000000\
00000000000000000000000000000000000000000000000000000000000000000000000000\
00000000000000000000000000000000000000000000000000000000000000000000000000\
00000000000000000000000000000000000000000000000000000000000000000000000000\
00000000000000000000000000000000000000000000000000000000000000000000000000\
00000000000000000000000000000000000000000000000000000000000000000000000000\
00000000000000000000000000000000000000000000000000000000000000000000000000\
00000000000000000000000000000000000000000000000000000000000000000000000000\
00000000000000000000000000000000000000000000000000000000000000000000000000\
00000000000000000000000000000000000000000000000181356974046297225616400123\
..........................................................................

>> print(Unquoted, "Lépésszám: ".             //
&>  expr2text(n));                            //

                           Lépésszám: 7

real  0m1.227s
user  0m1.020s
sys   0m0.210s
```