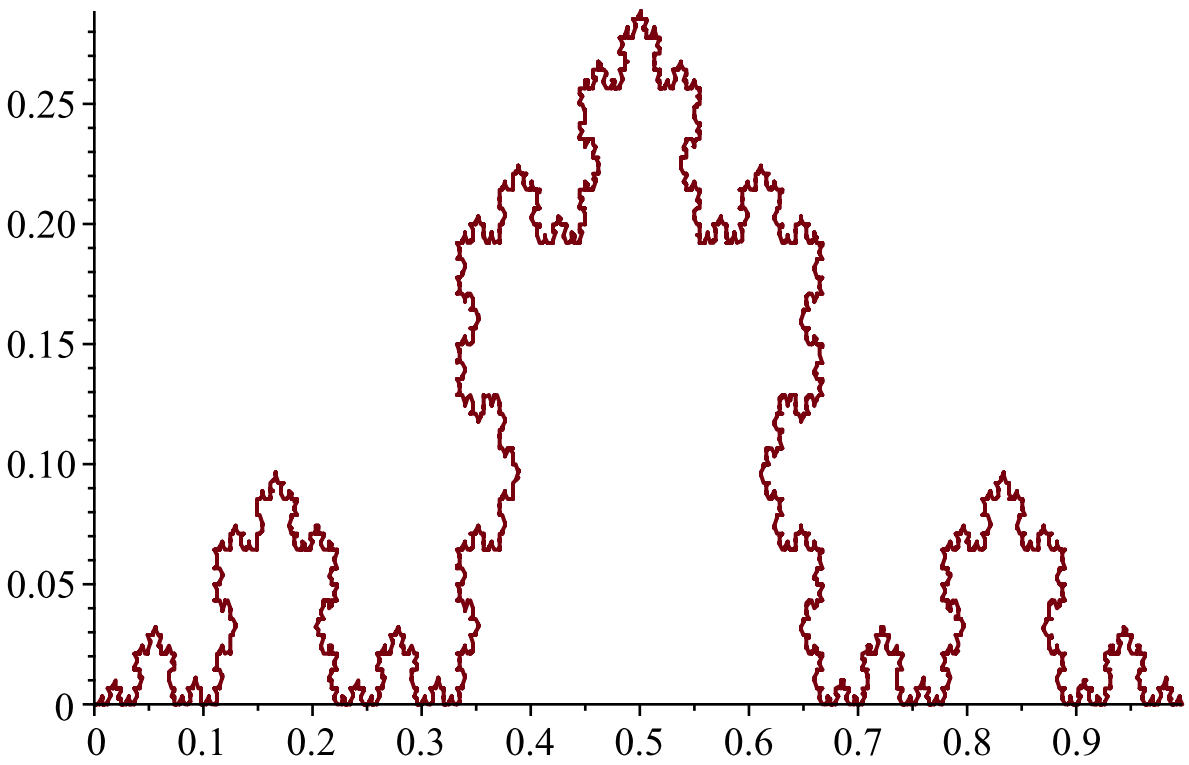
```
> restart:
  N:=10000:
  for k from 0 to N do
            T[k] := evalf(k/N);
  end do:

  TaTau:=proc(t,n)
            add(dig(t,k)/2^(k-2*n),k=2*n+2..30,2):
  end proc:

  g:=proc(a,b)
  (-1)^a*(a-b)^2:
  end proc:

  dig1 := proc (t, n)
            local tList,tString, NomerE, m;
            convert(t,binary);
            tString:=convert(%,string);
            NomerE:=SearchText("e"           , %);
            m:=length(tString);
            if NomerR<>0 then
                      tString:=substring(tString,2..NomerE-1):
            else
                      tString:=substring(tString,2..m):
            fi:
            tList:=convert(tString,list);
            parse(tList[n]);
  end proc:


  dig:= proc (t, n)
            local s,p,i:
            s:=t:
            for i from 1 to n do
                      p:=trunc(s*2):
                      s:=s*2-p:
            end do:
            p;
  end proc:


  Koch:=proc(n,t)
            local c, alpha;
            alpha:=evalf(Pi/3):
            c:=1/(2+2*cos(alpha)):
            c^n*TaTau(t,n)*exp(I*alpha*add(g(dig(t,2*k-1),dig(t,2*
  k)),k=1..n))+add(c^(j-1)*(dig(t,2*j-1)*(dig(t,2*j-1)+dig(t,2*j))
  /2+(-1)^dig(t,2*j-1)*dig(t,2*j)*c+dig(t,2*j-1)*(1-dig(t,2*j))*c*
  sin(alpha)*I)*exp(I*alpha*add(g(dig(t,2*k-1),dig(t,2*k)),k=1..
  j-1)),j=1..n):
  end proc:
> plot([seq([evalc(Re(Koch(5,T[k]))),evalc(Im(Koch(5,T[k])))],k=1..
  N-1)])
```




```
> t0:=0.13:
  convert(t0,binary);
  trunc(%*10^16);
  d :=convert(%, base, 10);

  %[1],%[2],%[3],%[4],%[5],%[6],%[7];
  m := nops(d);

  TaTau(t0,1)/4; evalf(%);

  add(d[m+1-k]/2^(k-2*1),k=2*1..m);
  seq(d[m+1-k],k=1..m);
  seq(d[m+1-k],k=2*1..m);
```

$$0.001000010100$$

$$10000101000000$$

$$d := [0, 0, 0, 0, 0, 0, 1, 0, 1, 0, 0, 0, 0, 1]$$

$$0, 0, 0, 0, 0, 0, 1$$

$$m := 14$$

$$\frac{5}{256}$$

$$0.01953125000$$

$$\frac{5}{64}$$

$$1, 0, 0, 0, 0, 1, 0, 1, 0, 0, 0, 0, 0, 0$$

$$0, 0, 0, 0, 1, 0, 1, 0, 0, 0, 0, 0, 0$$

(1)

```
> Koch(5,0.12)
```

$$0.1548455949 + 0.08818861740\,I \quad (2)$$

Warning, inserted missing semicolon at end of statement

$$14 \quad (3)$$

```
>
>
> 0.13: convert(%,binary);
  tString:=convert(%,string);
  NomerE:=SearchText("e"          , %);
  m:=length(tString);
  if NomerR<>0 then
            tString:=substring(tString,2..NomerE-1):
  else
            tString:=substring(tString,2..m):
  fi:
  tList:=convert(tString,list);
```

$$0.001000010100$$

$$tString := ".1000010100e\text{-}2"$$

$$NomerE := 12$$

$$m := 14$$

$$tList := ["1", "0", "0", "0", "0", "1", "0", "1", "0", "0"] \quad (4)$$

```
> t0:=0.13:
  convert(%,binary);
  s:=t0:
  for i from 1 to 8 do
  p:=trunc(s*2):
  s:=s*2-trunc(s*2):
  end do:
  p;
```

$$0.001000010100$$

$$1 \quad (5)$$

```
>
>
>
>
```