

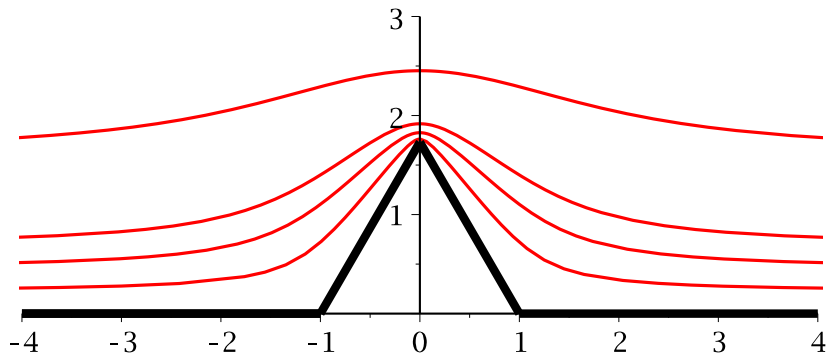
```
> with(plots):with(plottools):  
>
```

```
> K:=evalf((1-sqrt(3)*I)/int(t^(2/3)/(1-t^2)^(1/3), t=0..1)) ;  
K:= 1.159595267 - 2.008477920I (1)
```

```
> f:= z -> evalf(K*z*int( (z*t)^(2/3) / (1-(z*t)^2)^(1/3) ,t=0..1,  
numeric=true,digits=3)+sqrt(3)*I);
```

```
f:= z→evalf( K z ( int( (z t)2/3 / (1 - z2 t2)1/3, t = 0..1, numeric = true, digits = 3 ) )  
+ I√3 ) (2)
```

```
> p1:=complexplot(f(x+I/10),x=-2..2,numpoints=10,color=red):  
> p2:=complexplot(f(x+2*I/10),x=-2..2,numpoints=10,color=red):  
> p3:=complexplot(f(x+3*I/10),x=-2..2,numpoints=10,color=red):  
> p4:=complexplot(f(x+0.7*I),x=-2..2,numpoints=10,color=red):  
> b1:=line([-4,0],[-1,0],color=black,thickness=4):  
b2:=line([-1,0],[0,sqrt(3)],color=black,thickness=4):  
b3:=line([0,sqrt(3)],[1,0],color=black,thickness=4):  
b4:=line([4,0],[1,0],color=black,thickness=4):  
> display(b1,p1,p2,p3,p4,b1,b2,b3,b4,view=[-4..4,0..3]);
```



```
> f(0);
```

1.732050808 I

(3)

```
> f(1);
```

0.9995711202 + 0.000742841 I

(4)

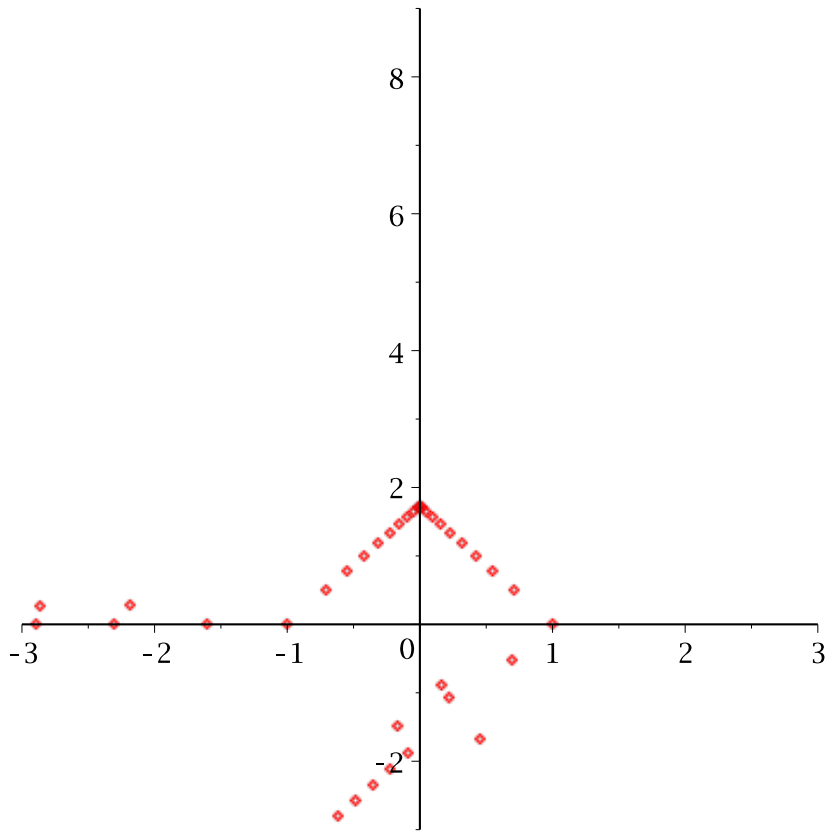
```
> f(-0.9);
```

-0.3060 + 1.202850808 I

(5)

```
> for n from -20 to 20 do P[n]:=f(n*0.1+0) end do:
```

```
> pointplot({seq([Re(P[m]),Im(P[m])],m=-20..20)},view=[-3..3,-3.9],color=red);
```



[v