|ctgx|>=1/V3

2p/3+pk<=x<=p+pk
p+pk<=x<=4p/3+pk

sin^2 x - V2/2*sinx <0
sinx=t
t^2-V2/2t<0
2t^2-V2t<0
t(2t-V2)=0
t=0 или V2/2
0<t<V2/2
0<sinx<V2/2
2pk<x<p/4+pk
3p/4+2pk<x<p+2pk

(cosx + V3/2)(cosx + V3) > 0
cosx=t
(t+V3/2)(t+V3)>0
t э(-oo;-V3),(-V3/2;+oo)
-V3/2<cosx<=1
-5p/6+2pk<x<=5p/6+2pk

ctg x - 4/ctg x + 3>=0

ctgx=t

t-4/t+3>=0

t^2+3t-4=0
D=9+16=25
t1=(-3+5)/2=1
t2=(-3-5)/2=-4
(t-1)(t+4)/t>=0
t э [-4;0),[1;+oo)
-4<=ctgx<0

$(x-2)^2 \cdot (x-1) \over (x+3)(x-1)$ ≤ 0

$-3 \quad 1 \quad 2$

$0 \quad {\sqrt2 \over 2}$

$-\sqrt3 \quad -{\sqrt3 \over 2}$
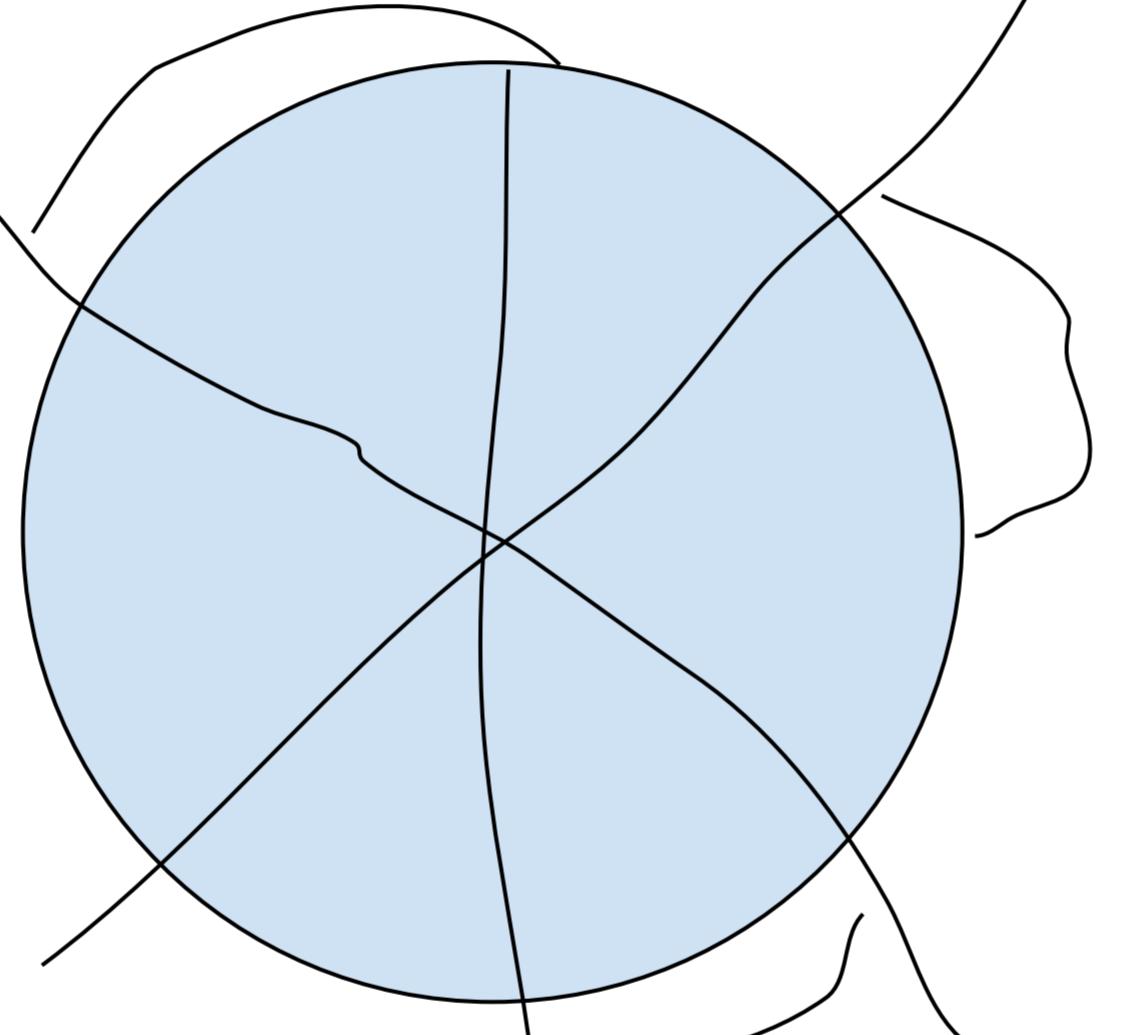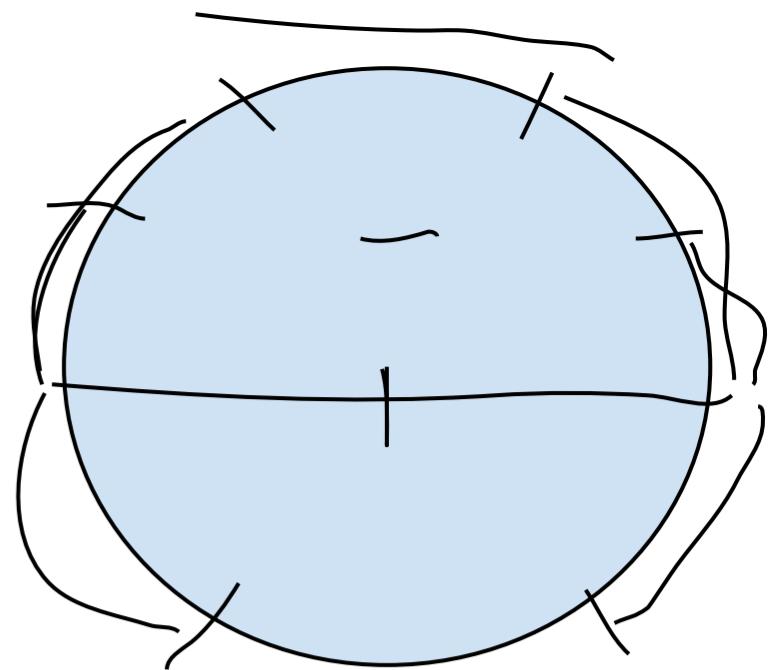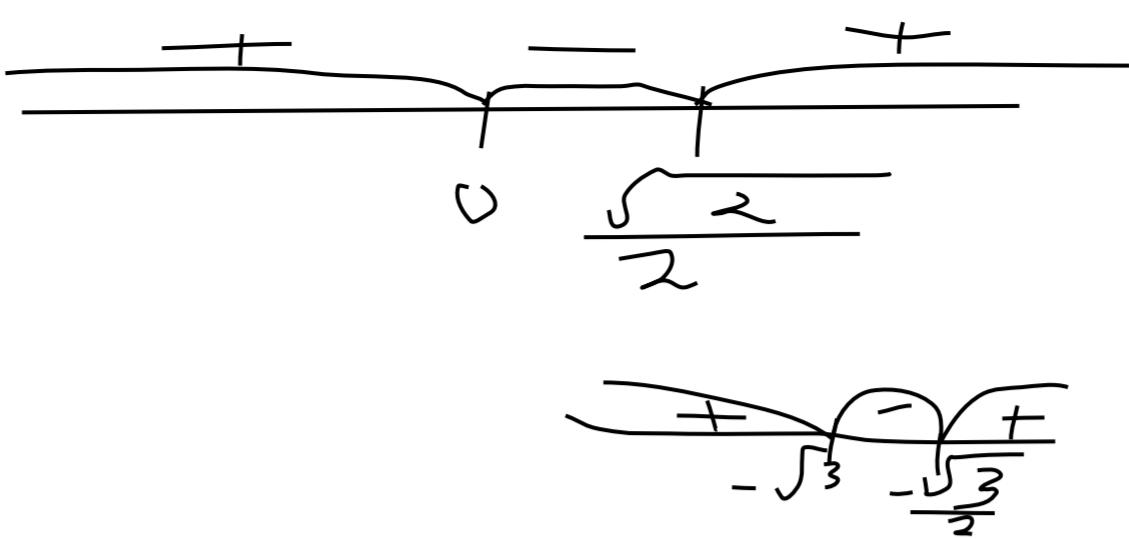
p/2+pk<x<=arcctg(-4)+pk
pk<x<=p/4+pk