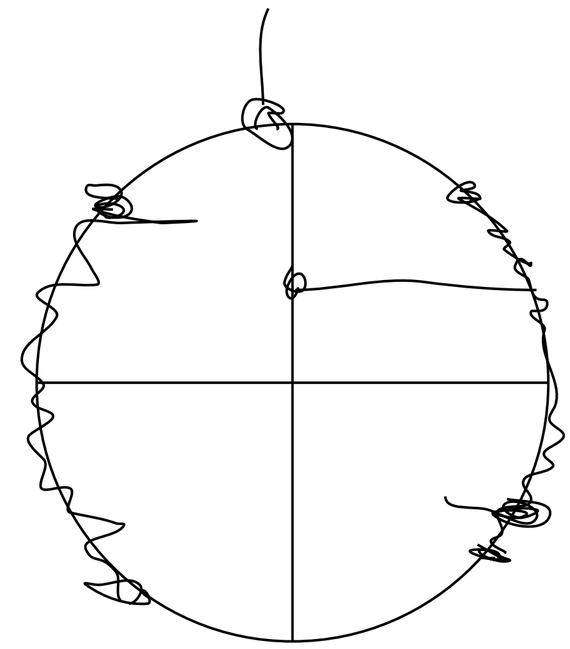
V(sinx + cosx)=cos2x
sinx+cosx=cos^2 2x
sinx+cosx=(cos^2 x-sin^2 x)^2
sinx+cosx=((sinx+cosx)(cosx-sinx))^2
sinx+cosx-((sinx+cosx)(cosx-sinx))^2=0
(sinx+cosx) (1-(sinx+cosx)*(cosx-sinx)^2)=0
sinx+cosx=0
V2sin(x+P/4)=0
x+P/4=Pk
x=Pk-P/4
1-(sinx+cosx)*(cosx-sinx)^2=0
1-(sinx+cosx)(cos^2 x - 2sinxcosx + sin^2 x)=0
1-(sinx+cosx)(1 - 2sinxcosx)=0
sin x + cos x =t
t^2=sin^2+2sinxcosx+cos^2=2sinxcosx+1
2sinxcosx=t^2-1
1-t(1-(t^2-1))=0
1-t(2-t^2)=0
1+t^3-2t=0
t^3-2t+1=0
t=1
1 0 -2 1
1 1 1 -1 0
t^2+t-1=0
D=1+4=5
t1,2=(-1+-V5)/2
sin x + cos x=1
V2sin(x+P/4)=1
x+P/4=P/4+2Pk
x=2Pk
x=P-2P/4+2Pk
x=3P/4+2Pk

cos2x>=0
-P/2+2Pk<=2x<=P/2+2Pk
-P/4+Pk<=x<=P/4+Pk

V(1-cos2x)=sin2x
V(2(1-cos2x)/2)=sin2x
V(2sin^2 x)=sin2x
V2*|sinx|=sin2x

sinx>=0
V2*sinx=sin2x
sinx*(V2-2cosx)=0
sinx=0
x=Pk
2cosx=V2
cosx=V2/2
x=+-P/4+2Pk
x=P/4+2Pk

sinx<0
-V2*sinx=sin2x
-sinx*(V2+2cosx)=0
-sinx=0
x=Pk
V2+2cosx=0
cosx=-V2/2
x=+-3P/4+2Pk
x=-3P/4+2Pk
Ответ Pk;P/4+2Pk;-3P/4+2Pk



V2sin(x+P/4)=(-1+V5)/2
sin(x+P/4)=(-1+V5)V2/4
x+P/4=arcsin((-1+V5)V2/4)+2Pk
x=arcsin((-1+V5)V2/4)-P/4+2Pk
x=3P/4-arcsin((-1+V5)V2/4)+2Pk
с минусом не подойдёт
Ответ до ОДЗ
x=3P/4-arcsin((-1+V5)V2/4)+2Pk;arcsin((-1+V5)V2/4)-P/4+2Pk;x=2Pk;
x=3P/4+2Pk

Ответ после ОДЗ
x=arcsin((-1+V5)V2/4)-P/4+2Pk;x=2Pk; x=3P/4+2Pk