tg14 x + 3ctg 14x + sin6x - 2v2*sin(3x+P/4) = 4/ (V3+1)

tg14 x + 3ctg 14x
(tg14 x + 3ctg 14x)/2>=V(tg14 x*3ctg 14x)
(tg14 x + 3ctg 14x)/2>=V3
(tg14 x + 3ctg 14x)>=2V3

(a+b)/2 >=V(ab) a= b (a+b)/2 =V(ab)

sin6x - 2v2*sin(3x+P/4)=-cos(P/2+6x) - 2v2*sin(3x+P/4)=
=2sin^2(p/4+3x)-2v2*sin(3x+P/4)-1=
=2sin^2(p/4+3x)-2v2*sin(3x+P/4)+1-2=
=[V2sin(p/4+3x)]^2-2*[v2*sin(3x+P/4)]*1+1^2-2=
=[V2sin(p/4+3x) - 1]^2-2

4/ (V3+1)=4V3-4/2=2V3-2=2(V3-1)

tg14 x + 3ctg 14x + [V2sin(p/4+3x) - 1]^2-2= 2V3-2
tg14 x + 3ctg 14x + [V2sin(p/4+3x) - 1]^2= 2V3
[V2sin(p/4+3x) - 1]^2=0
V2sin(p/4+3x) - 1=0
V2sin(p/4+3x)=1
sin(p/4+3x)=1/V2=V2/2
P/4+3x=p/4+2pk
3x=2pk
x=2pk/3
P/4+3x=3p/4+2pk
3x=p/2+2pk
x=P/6+2pk/3
Ответ:x=P/6+2pk/3; x=2pk/3

sinx=cos(P/2-x)
cosx=sin(P/2-x)

tg14 x + 3ctg 14x = 2V3

tg14 x=3ctg 14x
tg14 x=3/tg14x
tg14x!=0
tg^2 14x-3=0
tg 14x=+-V3
14x=+-p/3+pn
x=+-p/42+pn/14