2V3sin5x - V3sinx = cos24x*cosx + 2cos5x - 6
2V3sin5x - 2cos5x = cos24x*cosx + V3sinx - 6
2V3sin5x - 2cos5x = V(12 + 4)[sin5x*2V3/4 -cos5x*2/4]=V(12 + 4)[sin5x*cosP/6 -cos5x*sinP/6]=4sin(5x-P/6)
cost=V3/2
sint=½
t=P/6
cos24x*cosx + V3sinx=V(cos^2(24x) + 3)[cosx*cos24x/V(cos^2(24x) + 3) + sinx*V3/V(cos^2(24x) + 3)]=
V(cos^2(24x) + 3)[cosx*sint+sinx*cost]=V(cos^2(24x) + 3)sin(x+t)
sint =cos24x/V(cos^2(24x) + 3)
cost=V3/V(cos^2(24x) + 3)
-2<=V(cos^2(24x) + 3)sin(x+t)<=2
-4<=4sin(5x-P/6)<=4
-8<=cos24x*cosx + V3sinx - 6<=-4

P/3+2P/5=
=(5P+6P)/15=11P/15
11P/15+2P/5=17P/15
17P/15+2P/5=23P/15
23P/15+2P/5=29P/15
29P/15+2P/5=35P/15=7P/3=2P+P/3

4sin(5x-P/6)=-4
sin(5x-P/6)=-1
5x-P/6=3P/2+2Pk
5x=3P/2+2Pk+P/6
5x=10P/6+2Pk
x=10P/30+2Pk/5
x=P/3+2Pk/5

Первая серия проверки
x=P/3+2Pk
cos24x*cosx + V3sinx - 6=cos24(P/3+2Pk)*cos(P/3+2Pk) + V3sin(P/3+2Pk) - 6=
=cos(8P+48Pk)*cos(P/3+2Pk) + V3sin(P/3+2Pk) - 6=1*½+V3*V3/2-6=½+3/2-6=-4

Вторая серия проверки
x=11P/15+2Pk
cos24x=cos24(11P/15+2Pk)=cos(264P/15+48Pk)=cos(264P/15)=cos((240P+24P)/15)=cos(8P/5)!=1
V(cos^2(24x) + 3)sin(x+t)-6 !=-4

Третья серия проверки
x=17P/15
cos24x=cos24(17P/15)=cos24(17P/15)=cos136P/5=cos(130P+6P)/5=cos(6P/5)!=1
V(cos^2(24x) + 3)sin(x+t)-6 !=-4

Четвертая серия проверки
x=23P/15
cos24x=cos24(23P/15)=cos(184P/5)=cos(180P+4P)/5=cos(4P/5)!=1

Четвертая серия проверки
x=29P/15
cos24x=cos24(29P/15)=cos(232P/5)=cos(230P+2P)/5=cos(2P/5)!=1
V(cos^2(24x) + 3)sin(x+t)-6 !=-4

Ответ: x=P/3+2Pk