sin^5 x + cos^5 x = 1 решить разложив по a^5 + b^5 =...
a^5+b^5=(a+b)(a^4-a^3b+a^2b^2-ab^3+b^4)
sin^5 x+cos^5 x=(sinx+cosx)(sin^4 x-sin^3 x*cosx+sin^2 x*cos^2 x-sinx*cos^3 x+cos^4 x)
(sinx+cosx)(sin^4 x-sin^3 x*cosx+sin^2 x*cos^2 x-sinx*cos^3 x+cos^4 x)=1
(sinx+cosx)(sin^4 x+2sin^2 x*cos^2 x+cos^4 x-sin^3 x*cosx+sin^2 x*cos^2 x-sinx*cos^3 x-2sin^2 x*cos^2 x)=1
(sinx+cosx)((sin^2 x+cos^2 x)^2-sin^3 x*cosx-sinx*cos^3 x-sin^2 x*cos^2 x)=1
(sinx+cosx)(1-sin^3 x*cosx-sinx*cos^3 x-sin^2 x*cos^2 x)=1
(sinx+cosx)(1-sinx*cosx(sin^2 x+cos^2 x)-sin^2 x*cos^2 x)=1
(sinx+cosx)(1-sinx*cosx-sin^2 x*cos^2 x)=1

y=sinx+cosx
t=sinx*cosx

Замена y=sinx+cosx
y^2=(sinx+cosx)^2=sin^2 x+2sinx*cosx+cos^2 x
y^2=sin^2 x+2sinx*cosx+cos^2 x
y^2=1+2*sinx*cosx
sinx*cosx=(y^2-1)/2
y*(1-(y^2-1)/2-(y^2-1)^2/4)=1
y*(1-(2*(y^2-1)+(y^2-1)^2)/4)=1 |*4
y*(4-2*(y^2-1)-(y^2-1)^2)=4
4y-2y*(y^2-1)-y*(y^2-1)^2=4
4y-2y^3+2y-y*(y^4-2y^2+1)=4
6y-2y^3-y^5+2y^3-y=4
5y-y^5=4
y^5-5y+4=0
y=1

1	0	0	0	-5	4
1	1	1	1	-4	0
1	2	3	4	0	

y^4+y^3+y^2+y-4=0
y=1
1*y^3+2y^2+3y+4=0
+-делитель 4 / делитель 1
+-2/1
+-4/1
+-1/1

sinx+cosx=1
V(2)*(sinx/V2+cosx/V2)=1
1/V2=sint
1/V2=cost
t=P/4
V2*(sinx*cost+cosx*sint)=1
V2*sin(x+P/4)=1
sin(x+P/4)=1/V2
x+P/4=P/4+2Pn
x=2Pn
x+P/4=3P/4+2Pn
x=P/2+2Pn
Ответ: 2Pn; P/2+2Pn

sin^2003 x + cos^2003 x = 1
Случай 1:
sinx=1
x=P/2+2Pn
cosx=0 при P/2+2Pn
Случай 2:
cosx=1
x=2Pn
sinx=0 при 2Pn
Случай 3
sinx!=1 && cosx!=1
тождество
sin^2 x + cos^2 x = 1
sin^2003 x + cos^2003 x < 1
Ответ: 2Pn; P/2+2Pn