sin^8 x + cos^8 x=17/16 cos^2 2x
(sin^2x)^4+(cos^2x)^4=17/16cos^22x
((1-cos2x)/2)^4+((1+cos2x)/2)^4=17/16cos^2 2x
cos2x=t
((1-t)/2)^4+((1+t)/2)^4=17/16t^2
(1-t)^4+(1+t)^4=17t^2
1-4t+6t^2-4t^3+t^4+1+4t+6t^2+4t^3+t^4=17t^2
2+12t^2+2t^4=17t^2
2t^4-5t^2+2=0
t^2= x
2x^2-5x+2=0
d=25-16=9
x1=(5-3)/4=½
x2=(5+3)/4=2
t=+-V(1/2)
cos2x=+V(½)=+V2/2
2x=+-P/4+2pk
x=+-p/8+pk
2x=+-3p/4+2pk
x=+-3p/8+pk
cos^2 2x=½
(1+cos4x)/2=½
cos4x/2=0
cos4x=0
4x=p/2+pk
x=p/8+pk/4
Ответ:p/8+pk/4