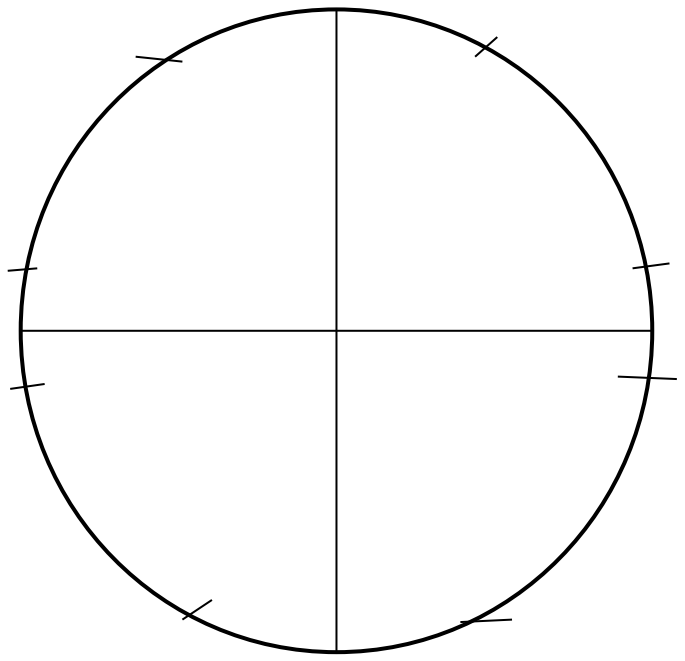
sin^8 x + cos^8 x=17/16 cos^2 2x
(sin^2 x)^4+ (cos^2 x)^4=17/16 cos^2 2x
((1-cos2x)/2)^4+((cos2x+1)/2)^4=17/16 cos^2 2x
cos2x=t
((1-t)/2)^4+((t+1)/2)^4=17/16 t^2
(1-t)^4/16+(t+1)^4/16=17/16 t^2
17/16 t^2-(1-t)^4/16-(t+1)^4/16=0
(17t^2-(1-t)^4-(t+1)^4)/16=0
17t^2-t^4+4t^3-6t^2+4t-1-t^4-4t^3-6t^2-4t-1=0
-2t^2-5t^2-2=0
17t^2-(1-t)^4-(t+1)^4=0
t^2=x
-2x^2+5x-2=0
2x^2-5x+2=0
D=9
x1=(5-3)/4=½
x2=(5+3)/4=2
t^2=½
t=+-1/V2
t^2=2
t=+-V2
cos2x=1/V2
2x=+-P/4+2Pn
x=+-P/8+Pn
cos2x=-1/V2
2x=+-3P/4+2Pn
x=+-3P/8+Pn
cos2x=V2
Нет
cos2x=-V2
Нет
Ответ1:+-P/8+Pn; +-3P/8+Pn.
Ответ2:P/8+Pn/4.



sin^2 x=(1-cos2x)/2
cos^2 x=(cos2x+1)/2

t^4-4t^3+6t^2-4t+1

1 1
1 2 1
1 3 3 1
1 4 6 4 1