8cos^4 x = 11cos2x -1
cos2x=2cos^2 x-1
cos^2 x=(cos2x+1)/2

8(cos^2 x)^2= 11cos2x -1
8((cos2x+1)/2)^2= 11cos2x -1
2*(cos^2 2x+2cos2x+1)=11cos2x-1
cos2x=t
2*(t^2+2t+1)=11t-1
2t^2+4t+2=11t-1
2t^2-7t+3=0
D=49-24=25
t1=(7+5)/4=3
t2=(7-5)/4=½
cos2x=3   Нельзя
cos2x=½
2x=P/3+2Pn
x=P/6+Pn
2x=5P/3+2Pn
x=5P/6+Pn
Ответ: P/6+Pn; 5P/6+Pn

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sin^4 x + cos^4 x = sinx*cosx
cos^2 x=(cos2x+1)/2
sin^4 x+(cos^2 x)^2=sinx*cosx
sin^4 x+((cos2x+1)/2)^2=sinx*cosx
sin^4 x+(cos2x+1)^2/4=sinx*cosx| *4
4sin^4 x+(cos2x+1)^2=4sinx*cosx
sin2x=2*sinx*cosx
4sin^4 x+cos^2 2x+2*cos2x+1=2*sin2x
sin^2 x=(1-cos2x)/2
4*(sin^2 x)^2+cos^2 2x+2*cos2x+1=2*sin2x
4*((1-cos2x)/2)^2+cos^2 2x+2*cos2x+1=2*sin2x
4*(1-cos2x)^2/4+cos^2 2x+2*cos2x+1=2*sin2x
(1-cos2x)^2+cos^2 2x+2*cos2x+1=2*sin2x
cos^2 2x-2*cos2x+1+cos^2 2x+2*cos2x+1=2*sin2x
2cos^2 2x+2=2*sin2x | :2
cos^2 2x+1=sin2x
cos^2 2x=1-sin^2 2x
1-sin^2 2x+1=sin2x
sin^2 2x+sin2x-2=0
sin2x=t
t^2+t-2=0
t1=-2
t2=1
sin2x=1
2x=P/2+2Pn
x=P/4+PN
Ответ:P/4+Pn

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sin^4 x + cos^4 x = sinx*cosx
sin^4 x+ 2*sin^2 x*cos^2 x+cos^4x=sinx*cosx+2*sin^2 x*cos^2 x
(sin^2 x+cos^2 x)^2=sinx*cosx(1+2sinx*cosx)
1=sinx*cosx(1+2sinx*cosx)
sinx*cosx=t
1=t(1+2t)
1=t+2t^2
2t^2+t-1=0
D=1+8=9
t1=(-1+3)/4=½
t2=(-1-3)/4=-1
sinx*cosx=½ |*2
2sinx*cosx=1
sin2x=1
2x=P/2+2Pn
x=P/4+Pn
sinx*cosx=-1 |*2
2sinx*cosx=-2
sin2x=-2
Ответе:P/4+Pn