$\cos^{-4} x + \cos^4 x = 1 + \cos 2x - 2\sin^2 2x$
$\cos^{-4} x + \cos^4 x = \cos 2x + \cos 4x$
$\cos^{-4} x + \cos^4 x = 2\cos(3x) \cdot \cos(1x)$

$\cos^{-4} x + \cos^4 x \geq 2$

$-2 \leq 2\cos(3x) \cdot \cos(1x) \leq 2$

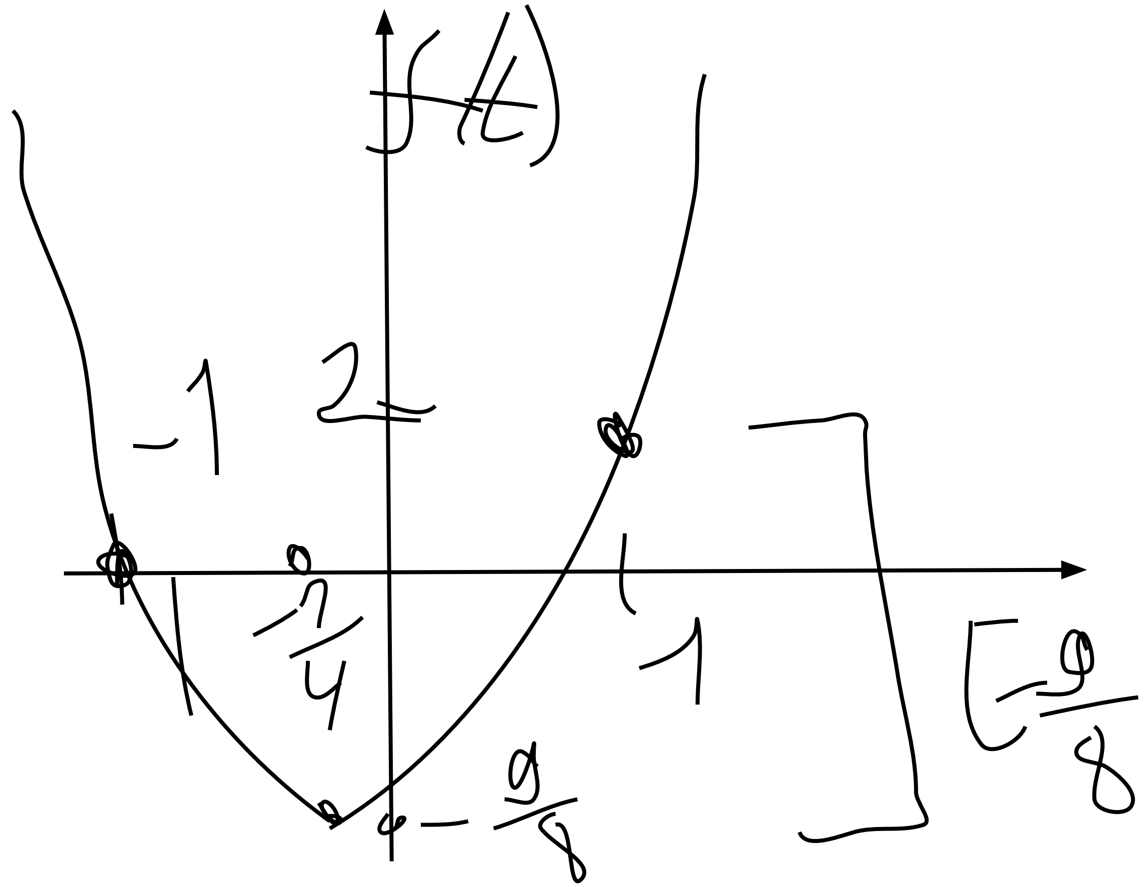
$2\cos(3x) \cdot \cos(1x) = 2$
$\cos^{-4} x + \cos^4 x = 2$

$a + \frac{1}{a} = 2$

$(a^2-2a+1)/a=0$
$D/4=1-1=0$
$x=1$
$(a-1)^2/a=0$
$a=1$

$2\cos(3x) \cdot \cos(1x)=2$
$\cos^4 x=1$
$\cos x=\pm 1$
$x_1=2pk$
$x_2=p+2pn$
$2\cos(6pk) \cdot \cos(2pk)=2$ true
$2\cos(3p+6pn) \cdot \cos(p+2pn)=2$ true
Ответ: pt

$f(x)=\cos 2x + \cos 4x = 2\cos^2 2x + \cos 2x - 1$
$\cos 2x = t, -1 \leq t \leq 1$
$f(t)=2t^2+t-1$
$t=-b/2a = -\frac{1}{4}$
$f(-\frac{1}{4})=\frac{1}{8} - \frac{1}{4} - 1=-9/8$
$f(1)=2$
$f(-1)=0$



$[-\frac{9}{8}; 2]$