

$$\begin{aligned} \frac{1}{2}(\cos(x-P/4) - \cos(3x+P/4)) &= 1 \\ \cos(x-P/4) - \cos(3x+P/4) &= 2 \\ \cos(x-P/4) &= 1 \\ \cos(3x+P/4) &= -1 \\ x-P/4 &= 2pk \\ x &= 2pk+p/4 \\ 3x+P/4 &= p+2pn \\ 3x &= 3p/4+2pn \\ x &= p/4+2pn/3 \\ 2pk+p/4 &= p/4+2pn/3 \\ 2k+1/4 &= 1/4-2n/3 \\ 24k+3 &= 3-8n \\ 24k-8n &= 0 \\ 24k &= 8n \\ 3k &= n \\ x &= p/4+2pk \\ \text{Ответ: } &p/4+2pk \end{aligned}$$