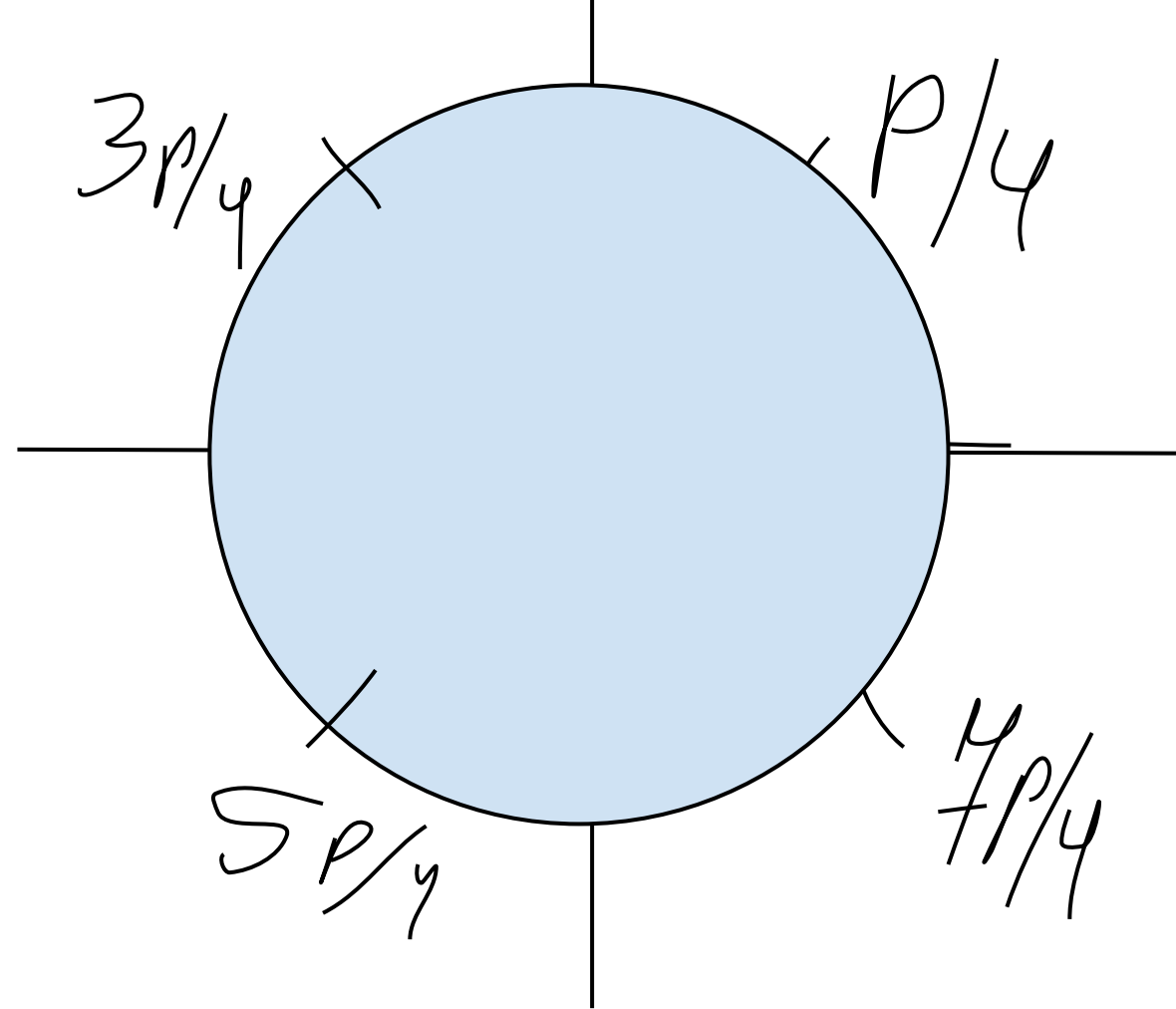


$$\begin{aligned}
3\sin x \cos x + 4\sin x &= 4 - 3\cos^2 x + \cos x \\
3\cos x(\sin x + \cos x) + 4(\sin x - 1) - \cos x &= 0 \\
\cos x(3\sin x + 3\cos x - 1) + 4(\sin x - 1) &= 0 \\
3\cos^2 x + 2\sin x \cos x + \cos x(\sin x - 1) + 4(\sin x - 1) &= 0 \\
2\sin x \cos x + 3\cos^2 x + (\cos x + 4)(\sin x - 1) &= 0 \\
2\sin x \cos x - 2\cos x + 2\cos x + 3\cos^2 x + (\cos x + 4)(\sin x - 1) &= 0 \\
2\cos x(\sin x - 1) + (\cos x + 4)(\sin x - 1) + 2\cos x + 3\cos^2 x &= 0 \\
(2\cos x + \cos x + 4)(\sin x - 1) + 2\cos x + 3\cos^2 x &= 0 \\
(3\cos x + 4)(\sin x - 1) + 2\cos x + 3\cos^2 x &= 0
\end{aligned}$$

$$\begin{aligned}
3\sin x \cos x + 4\sin x - 4 + 3\cos^2 x - \cos x &= 0 \\
3\sin x \cos x + 4\sin x - 4 + 3 - 3\sin^2 x - \cos x &= 0 \\
3\sin x \cos x + \sin x + 3\sin x - 1 - 3 + 3 - 3\sin^2 x - \cos x &= 0 \\
3\sin x(\cos x + 1 - \sin x) - \cos x + \sin x - 1 &= 0 \\
3\sin x(\cos x + 1 - \sin x) - (\cos x - \sin x + 1) &= 0 \\
(3\sin x - 1)(\cos x + 1 - \sin x) &= 0 \\
3\sin x - 1 &= 0
\end{aligned}$$

$$\begin{aligned}
3\sin x &= 1 \\
\sin x &= \frac{1}{3} \\
x_1 &= \arcsin\left(\frac{1}{3}\right) + 2pk \\
x_2 &= \pi - \arcsin\left(\frac{1}{3}\right) + 2pk \\
\cos x + 1 - \sin x &= 0 \\
\cos x - \sin x &= -1 \\
\sin x - \cos x &= 1 \\
\sqrt{2}\left(\frac{1}{\sqrt{2}}\sin x - \frac{1}{\sqrt{2}}\cos x\right) &= 1 \\
\cos a &= \frac{1}{\sqrt{2}} \\
\sin a &= -\frac{1}{\sqrt{2}} \\
\sqrt{2}(\cos a \sin x - \sin a \cos x) &= 1
\end{aligned}$$



$$\begin{aligned}
\sqrt{2}\sin(x + \pi/4) &= 1 \\
\sin(x + \pi/4) &= 1/\sqrt{2} \\
\sin(x + \pi/4) &= \sqrt{2}/2 \\
x + \pi/4 &= \pi/4 + 2pk \\
x + \pi/4 &= 3\pi/4 + 2pk \\
x &= 2pk \\
x &= \pi/2 + 2pk \\
\text{Ответ: } x &= 2pk \\
x &= \pi/2 + 2pk \\
x_1 &= \arcsin\left(\frac{1}{3}\right) + 2pk \\
x_2 &= \pi - \arcsin\left(\frac{1}{3}\right) + 2pk
\end{aligned}$$