

$$|\cos x| = \sin 3x - 1$$

$$0 \leq |\cos x| \leq 1$$

$$-2 \leq \sin 3x - 1 \leq 0$$

$$|\cos x| = 0$$

$$\sin 3x = 1$$

$$x = \pi/2 + \pi k$$

$$3x = \pi/2 + 2\pi n$$

$$x = \pi/6 + 2\pi n/3$$

$$\pi/2 + \pi k = \pi/6 + 2\pi n/3$$

$$6 + 12k = 2 + 8n$$

$$12k - 8n = -4$$

$$3k - 2n = -1$$

$$\text{НОД} = 1$$

$$k_0 = 1$$

$$n_0 = 2$$

$$k = 1 + 2t$$

$$n = 2 - 3t$$

Проверка

$$3 + 6t - 4 + 6t = -1$$

$$x = \pi/2 + \pi(1 + 2t)$$

$$\text{Ответ: } x = 3\pi/2 + 2\pi t$$