

$$\sin^2 x - \sqrt{2}\cos(2x - \pi/4) = 1$$

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

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

$$\sin^2 x - \cos 2x - \sin 2x = 1$$

$$2\sin^2 x - \cos 2x - \sin 2x = 2$$

$$2\sin^2 x - \cos^2 2x + \sin^2 2x - 2\sin x \cos x = 2$$

$$3\sin^2 x - 2\sin x \cos x - \cos^2 2x = 2$$

$$3\sin^2 x / \cos^2 x - 2\sin x / \cos x - 1 = 2 / \cos^2 x = 2 + 2\operatorname{tg}^2 x$$

$$3\operatorname{tg}^2 x - 2\operatorname{tg} x - 1 = 2 + 2\operatorname{tg}^2 x$$

$$t = \operatorname{tg} x$$

$$3t^2 - 2t - 1 = 2 + 2t^2$$

$$5t^2 - 2t - 3 = 0$$

$$t_1 = 1$$

$$t_2 = -3/5$$

$$\operatorname{tg} x = 1$$

$$x = \pi/4 + \pi k$$

$$\operatorname{tg} x = -3/5$$

$$x = \operatorname{arctg}(-3/5) + \pi k$$

A, B, C = числа u, v переменные

$$Au^2 + Bu^1v^1 + Cv^2 = 0 \quad | :v^2$$

$$Au^2/v^2 + Bu^1/v^1 + C = 0$$

$$At^2 + Bt + C = 0$$