

$$3\sin x \cdot \cos x + 4\sin x = 4 - 3\cos^2 x + \cos x$$

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

$$3\sin x \cdot \cos x + 4\sin x = 4\sin^2 x + 4\cos^2 x - 3\cos^2 x + \cos x$$

$$3\sin x \cdot \cos x + 4\sin x = 4\sin^2 x + \cos^2 x + \cos x$$

$$3\sin x \cdot \cos x + 4\sin x = 4\sin^2 x + 1 - \sin^2 x + \cos x$$

$$3\sin x \cdot \cos x + 4\sin x = 3\sin^2 x + 1 + \cos x$$

$$3\sin x \cdot \cos x + 3\sin x + \sin x = 3\sin^2 x + 1 + \cos x$$

$$3\sin x \cdot \cos x + 3\sin x + \sin x - 3\sin^2 x - \cos x - 1 = 0$$

$$\cos x(3\sin x - 1) - \sin x(3\sin x - 1) + (3\sin x - 1)(1) = 0$$

$$(3\sin x - 1)(\cos x - \sin x + 1) = 0$$

$$3\sin x - 1 = 0$$

$$3\sin x = 1$$

$$\sin x = \frac{1}{3}$$

$$x = \arcsin\left(\frac{1}{3}\right) + 2Pn$$

$$x = P - \arcsin\left(\frac{1}{3}\right) + 2Pn$$

$$\cos x - \sin x + 1 = 0$$

$$\sqrt{2}(\cos x/\sqrt{2} - \sin x/\sqrt{2}) =$$

$$\sin y = 1/\sqrt{2}$$

$$\cos y = -1/\sqrt{2}$$

$$y = 3P/4$$

$$\sqrt{2}(\cos x \cdot \sin y + \sin x \cdot \cos y) = \sqrt{2} \sin(x+y)$$

$$\sqrt{2} \sin(x+y) + 1 = 0$$

$$\sqrt{2} \sin(x + 3P/4) + 1 = 0$$

$$\sin(x + 3P/4) = -1/\sqrt{2}$$

$$x + 3P/4 = 7P/4 + 2Pn$$

$$x = P + 2Pn$$

$$x + 3P/4 = 5P/4 + 2Pn$$

$$x = P/2 + 2Pn$$

Ответ:  $P + 2Pn$ ;  $P/2 + 2Pn$ ;  $\arcsin(1/3) + 2Pn$ ;  $P - \arcsin(1/3) + 2Pn$ .

