

пример 1

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

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

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

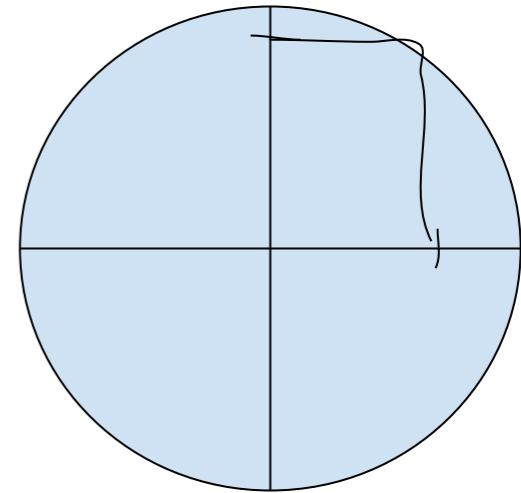
пример 2

$$1\sin x - \cos x = \sqrt{2}\sin(x+7\pi/4)$$

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

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

$$y = 7\pi/4$$



пример 3

$$1\sin x - \sqrt{3}\cos x = 2\sin(x+5\pi/3)$$

$$\sin y = -\sqrt{3}/2$$

$$\cos y = 1/2$$

$$y = 5\pi/3$$

пример 4

$$\sqrt{3}\sin x + 1\cos x = 2\sin(x+\pi/6)$$

$$\sin y = 1/2$$

$$\cos y = \sqrt{3}/2$$

$$y = \pi/6$$

пример 5

$$5\sin x + 7\cos x = \sin(x+\arcsin(7/\sqrt{74}))$$

$$\sin y = 7/\sqrt{74}$$

$$\cos y = 5/\sqrt{74}$$

$$y = \arcsin(7/\sqrt{74}); \arccos(5/\sqrt{74})$$