

$$\sqrt{1-\cos 2x} / \sin x = \sqrt{2} * (\cos x - 1/2)$$

$$(1-\cos 2x)/\sin x = 2(\cos x - 1/2)^2$$

$$1-\cos 2x \geq 0$$

$$\sin x \neq 0$$

$$(1-1+2\sin^2 x)/\sin^2 x = 2(\cos x - 1/2)^2$$

$$2 = 2(\cos x - 1/2)^2$$

$$1 = (\cos x - 1/2)^2$$

$$1 - (\cos x - 1/2)^2 = 0$$

$$(1 - \cos x + 1/2)(1 + \cos x - 1/2) = 0$$

$$\cos x = 3/2$$

x - нет

$$-1/2 = \cos x$$

$$x_{1,2} = \pm 2\pi/3 + 2\pi k$$

$$\sin x = \pm \sqrt{3}/2 \neq 0$$

x1, x2

$$\sin x * (\cos x - 1/2) \geq 0$$

$$\sqrt{3}/2(-1/2 - 1/2) \geq 0 - x_1, \text{ неверно}$$

$$-\sqrt{3}/2(-1/2 - 1/2) \geq 0$$

Ответ:  $-2\pi/3 + 2\pi k$

$$a^2 = b^2$$

$$a^2 - b^2 = 0$$

$$(a-b)(a+b) = 0$$

$$\sqrt{a} = b \quad b \geq 0$$

$$\frac{\sqrt{a}}{c} = b$$

$$\sin x \neq 0$$

$$1 - \cos 2x \geq 0$$