

$$\operatorname{tg}(P/2(\cos x)) = \operatorname{ctg}(P/2(\sin x))$$

$$\sin(P/2(\cos x))/\cos(P/2(\cos x)) - \cos(P/2(\sin x))/\sin(P/2(\sin x)) = 0$$

$$(\sin(P/2(\cos x)) * \sin(P/2(\sin x)) - \cos(P/2(\cos x)) * \cos(P/2(\sin x))) / (\cos(P/2(\cos x)) * \sin(P/2(\sin x))) = 0$$

$$-(\cos((P/2(\cos x) + P/2(\sin x)))) / (\cos(P/2(\cos x)) * \sin(P/2(\sin x))) = 0$$

$$\cos((P/2(\cos x) + P/2(\sin x))) = 0$$

$$p/2 * \cos x + p/2 * \sin x = p/2 + pk$$

$$\cos x + \sin x = 1 + 2k$$

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

$$\sqrt{2}(\sin x * \cos a + \cos x * \sin a) = 1 + 2k$$

$$\sqrt{2}(\sin(x+a)) = 1 + 2k$$

$$\cos a = \sqrt{2}/2$$

$$\sin a = \sqrt{2}/2$$

$$a = P/4$$

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

$$\sin(p/4 + x) = (1 + 2k)/\sqrt{2}$$

$$-1 < ((1 + 2k)/\sqrt{2}) < 1$$

$$-\sqrt{2} < 1 + 2k < \sqrt{2}$$

$$-\sqrt{2} - 1 < 2k < \sqrt{2} - 1$$

$$(-\sqrt{2} - 1)/2 < k < (\sqrt{2} - 1)/2$$

$$k = -1$$

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

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

$$p/4 + x = 5p/4 + 2pt$$

$$x = 4p/4 + 2pt$$

$$p/4 + x = 7p/4 + 2pt$$

$$x = 6p/4 + 2pt$$

$$k = 0$$

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

$$p/4 + x = 3p/4 + 2pk$$

$$x = 2p/4 + 2pk$$

$$p/4 + x = p/4 + 2pk$$

$$x = 2pk$$

Ответ: $2PT; 2P/4 + 2PT; 6P/4 + 2PT; 4P/4 + 2PT$

Final ANSWER: $2P/4 + 2PT; 6P/4 + 2PT = P/2 + PT$

$$\cos(P/2(\cos x)) * \sin(P/2(\sin x)) \neq 0$$

$$P/2(\cos x) \neq p/2 + pk$$

$$\cos x \neq 1 + 2k$$

$$k = 0; -1$$

$$x \neq 2pt$$

$$x \neq p + 2pt$$

$$P/2(\sin x) \neq PK$$

$$\sin x \neq 2k$$

$$k = 0$$

$$x \neq PK$$

