

2.24

$$\begin{cases} y = \operatorname{tg} x \\ y = \operatorname{ctg} x \\ 0 \leq x < 2\pi \end{cases}$$

$$\rightarrow \operatorname{tg} x = \operatorname{ctg} 2x$$

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

$$\operatorname{tg} x (1 - \operatorname{ctg} x) = 0$$

$$x = \frac{\pi}{2} + \pi k$$

$$x = \frac{\pi}{2} + 2\pi k$$

$$\left(\frac{\pi}{2}, 0\right)$$

$$\left(\frac{3\pi}{2}, 0\right)$$

הפתרון הוא $x = \frac{\pi}{2} + \pi k$