

Решите систему неравенств: $\begin{cases} 2\sin 2x + \sqrt{2} \geq 0, \\ 2\cos 2x - 1 \leq 0. \end{cases}$

1) $\left[\frac{\pi}{3} + 2\pi n; \frac{5\pi}{4} + 2\pi n \right), n \in \mathbb{Z}$ 2) $\left[\frac{\pi}{6} + \pi n; \frac{5\pi}{8} + \pi n \right), n \in \mathbb{Z}$

3) $\left[\frac{\pi}{6} + \pi n; \frac{5\pi}{8} + \pi n \right], n \in \mathbb{Z}$ 4) $\left(\frac{\pi}{3} + 2\pi n; \frac{5\pi}{4} + 2\pi n \right), n \in \mathbb{Z}$