

Решите простейшее тригонометрическое неравенство $\sin 2x \leq \frac{\sqrt{2}}{2}$.

$$\begin{array}{lll}
 1) \bigcup_{k \in \mathbb{Z}} \left(-\frac{5\pi}{8} + \pi k; \frac{\pi}{8} + \pi k \right] & 2) \bigcup_{k \in \mathbb{Z}} \left[-\frac{5\pi}{8} + \pi k; \frac{\pi}{8} + \pi k \right) & 3) \bigcup_{k \in \mathbb{Z}} \left[-\frac{5\pi}{8} + \pi k; \frac{\pi}{8} + \pi k \right] \\
 4) \bigcup_{k \in \mathbb{Z}} \left(-\frac{5\pi}{8} + \pi k; \frac{\pi}{8} + \pi k \right) & 5) \bigcup_{k \in \mathbb{Z}} \left[-\frac{3\pi}{8} + \pi k; \frac{\pi}{8} + \pi k \right] & 6) \bigcup_{k \in \mathbb{Z}} \left[-\frac{5\pi}{8} + \pi k; \frac{3\pi}{8} + \pi k \right]
 \end{array}$$