

Решите простейшее тригонометрическое неравенство $\cos 3x < -\frac{1}{2}$.

$$1) \bigcup_{k \in \mathbb{Z}} \left[\frac{2\pi}{9} + \frac{2\pi k}{3}; \frac{4\pi}{9} + \frac{2\pi k}{3} \right). \quad 2) \bigcup_{k \in \mathbb{Z}} \left(\frac{2\pi}{9} + \frac{2\pi k}{3}; \frac{4\pi}{9} + \frac{2\pi k}{3} \right].$$

$$3) \bigcup_{k \in \mathbb{Z}} \left(\frac{2\pi}{9} + \frac{\pi k}{3}; \frac{4\pi}{9} + \frac{\pi k}{3} \right). \quad 4) \bigcup_{k \in \mathbb{Z}} \left(\frac{2\pi}{9} + \frac{2\pi k}{3}; \frac{4\pi}{9} + \frac{2\pi k}{3} \right)$$

$$5) \bigcup_{k \in \mathbb{Z}} \left[\frac{2\pi}{9} + \frac{2\pi k}{3}; \frac{4\pi}{9} + \frac{2\pi k}{3} \right]. \quad 6) \bigcup_{k \in \mathbb{Z}} \left(\frac{2\pi}{9} + \frac{4\pi k}{3}; \frac{4\pi}{9} + \frac{4\pi k}{3} \right).$$