

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

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

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