

1. Решите простейшее тригонометрическое неравенство $3 \operatorname{tg} \frac{2x}{3} \geq \sqrt{3}$.

1) $\bigcup_{k \in \mathbb{Z}} \left(\frac{\pi}{4} + \frac{3\pi k}{2}; \frac{3\pi}{4} + \frac{3\pi k}{2} \right)$ 2) $\bigcup_{k \in \mathbb{Z}} \left[\frac{\pi}{4} + \frac{5\pi k}{2}; \frac{3\pi}{4} + \frac{5\pi k}{2} \right)$

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

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

2. Решите простейшее тригонометрическое неравенство $3 \operatorname{tg} \frac{3x}{2} \leq -\sqrt{3}$.

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

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

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