

1. Решите простейшее тригонометрическое неравенство $\sin x > \frac{1}{2}$.

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

2. Решите простейшее тригонометрическое неравенство $2 \sin x \geq -\sqrt{3}$.

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