1. Решите тригонометрическое неравенство $6\sin^2 x - \sin x - 1 < 0$.

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

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

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

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

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

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