

2.43

7

$$2\sin^3 x - \cos 2x > \sin x$$

$$\sin x (2\sin^2 x - 1) - \cos 2x > 0$$

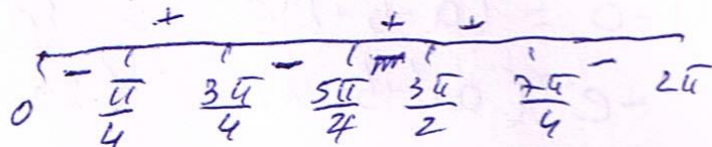
$$-\cos 2x \sin x - \cos 2x > 0$$

$$-\cos 2x (\sin x + 1) > 0$$

$$2x = \frac{\pi}{2} + \pi k$$

$$x = \frac{\pi}{4} + \frac{\pi k}{2}$$

$$x = \frac{3\pi}{2} + 2\pi k$$



$$\frac{\pi}{4} + 2\pi k < x < \frac{3\pi}{4} + 2\pi k$$

$$\frac{5\pi}{4} + 2\pi k < x < \frac{7\pi}{4} + 2\pi k$$

$$x \neq \frac{3\pi}{2} + 2\pi k$$

$$\left. \begin{array}{l} \frac{\pi}{4} + 2\pi k < x < \frac{3\pi}{4} + 2\pi k \\ \frac{5\pi}{4} + 2\pi k < x < \frac{7\pi}{4} + 2\pi k \end{array} \right\} \frac{\pi k}{4} < x < \frac{3\pi}{4} + \pi k$$

$$x \neq \frac{3\pi}{2} + 2\pi k$$