

2.6

$$\sin^3 x \cos x - \sin x \cos^3 x = -\frac{1}{8}$$

$$\sin x \cos x (\sin^2 x - \cos^2 x) = -\frac{1}{8}$$

$$-\frac{1}{2} \sin 2x \cos 2x = -\frac{1}{8}$$

$$-\frac{1}{2} \cdot \frac{1}{2} \sin 4x = -\frac{1}{8}$$

$$\sin 4x = \frac{1}{2}$$

$$4x = \frac{\pi}{6} + 2\pi k$$

$$x = \frac{\pi}{24} + \frac{\pi k}{2}$$

$$4x = \pi - \frac{\pi}{6} + 2\pi k$$

$$x = \frac{5\pi}{24} + \frac{\pi k}{2}$$