Question:

The set of all values of x in $(-\pi, \pi)$ satisfying $|4\sin x - 1| < \sqrt{5}$ is given by

a)

$$\left(-\frac{\pi}{10}, \frac{3\pi}{10}\right)$$

b)

$$\left(\frac{\pi}{10}, \frac{3\pi}{10}\right)$$

c)

$$\left(\frac{\pi}{10}, -\frac{3\pi}{10}\right)$$

d) none of these

Answer:

$$\left(-\frac{\pi}{10}, \frac{3\pi}{10}\right)$$