

GATE 2023-EE Q49

EE23BTECH11052 - Abhilash Rapolu

QUESTION: The period of the discrete-time signal $x[n]$ described by the equation below is N = (Round off to the nearest integer).

$$x[n] = 1 + 3 \sin \left(\frac{15\pi}{8}n + \frac{3\pi}{4} \right) - 5 \sin \left(\frac{\pi}{3}n - \frac{\pi}{4} \right)$$