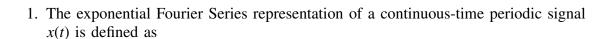


EE3900



$$x(t) = \sum_{k=-\infty}^{\infty} a_k e^{jk\omega_0 t}$$
 (0.1)

where ω_0 is the fundamental angular frequency of x(t) and the coefficients of the series are a_k . The following information is given about x(t) and a_k .

I x(t) is real and even, with fundamental period 6.

II The average value of x(t) is 2.

III
$$a_k = \begin{cases} k, & 1 \le k \le 3\\ 0, & k > 3 \end{cases}$$

The average power of the signal x(t) (rounded off to one decimal place) is _____.

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