

(1)

$$f(x) = \cdots + \frac{1}{5\pi}e^{-i5x} - \frac{1}{3\pi}e^{-i3x} + \frac{1}{\pi}e^{-ix} + \frac{1}{\pi}e^{ix} - \frac{1}{3\pi}e^{i3x} + \frac{1}{5\pi}e^{i5x} + \cdots \quad (1)$$

(2)

$$f(x) = \cdots + \frac{i}{5\pi}e^{-i5x} + \frac{i}{3\pi}e^{-i3x} + \frac{i}{\pi}e^{-ix} - \frac{i}{\pi}e^{ix} - \frac{i}{3\pi}e^{i3x} - \frac{i}{5\pi}e^{i5x} + \cdots \quad (2)$$