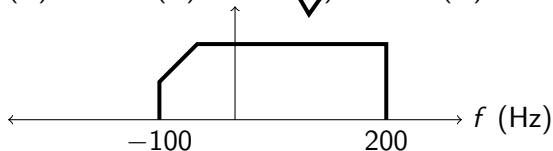# Signals

(1) The spectral representation of a signal $x(t)$ is contained within the graph shown below. From the given choices, the minimal sample-rate such that $x(t)$ can be recovered from it samples is
(A) 200 Hz (B) 299Hz (C) 400 Hz (D) 600 Hz

(2) A signal $x(t)$ with maximum frequency below 1000 Hz, was sampled at 4000 samples per second. The formula to get back $x(t)$ from the samples is _____ .

(3) Find a periodic signal orthogonal to the $x(t)$ given below.