1) $f(x) = |\cos x|, \quad -\pi < x < \pi$

   (a) Find the fundamental period.

   (b) Find the Fourier series of $f(x)$.

2) $f(x) = 1, \quad 0 < x < \pi$

   (a) Find the fundamental period (for Fourier sine series).

   (b) Find the Fourier sine series of $f(x)$.