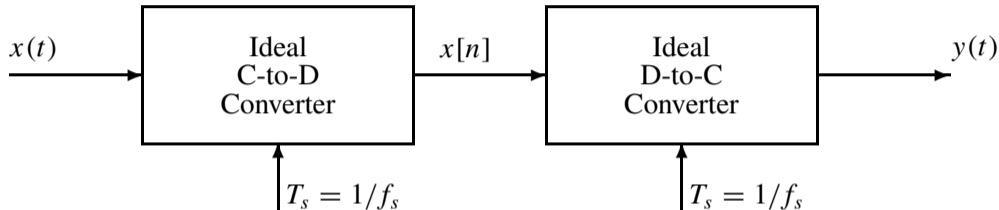## PROBLEM:

Consider the following system.

Suppose that the output of the C-to-D converter is

$$x[n] = 5 + 8\cos(0.4\pi n) + 4\cos(0.8\pi n + \pi/3)$$

when the sampling rate is $f_s = 1/T_s = 2000$ samples/second. Determine the output $y(t)$ of the ideal D-to-C converter.