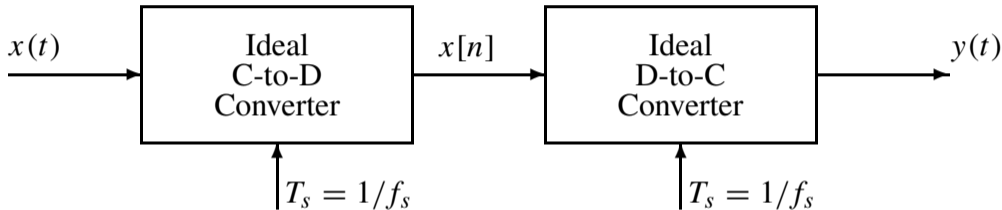


PROBLEM:

Consider the following system.



If $x(t)$ is given by the formula

$$x(t) = 21 + 10 \cos(2200\pi t + \pi/2) - 5 \cos(5500\pi t - \pi/4),$$

what condition must be satisfied by the sampling rate, $f_s = 1/T_s$, such that $y(t) = x(t)$?