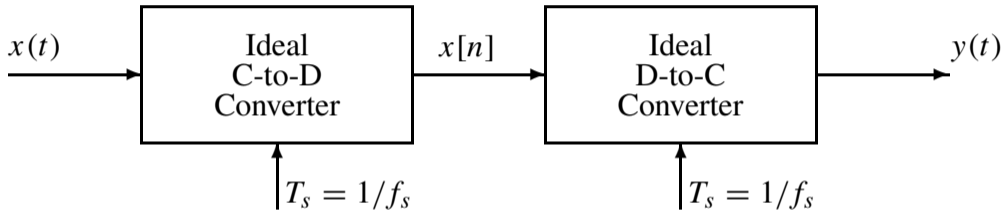


## PROBLEM:

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  $y(t) = x(t)$ ?