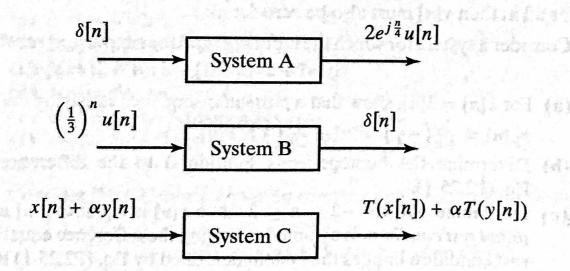
- 2.27. For each of the systems in Figure P2.27, pick the strongest valid conclusion that you can make about each system from the following list of statements:
 - (i) The system must be LTI and is uniquely specified by the information given.
 - (ii) The system must be LTI, but cannot be uniquely determined from the information given.
 - (iii) The system could be LTI, and if it is, the information given uniquely specifies the system.
 - (iv) The system could be LTI, but cannot be uniquely determined from the information given.
 - (v) The system could not possibly be LTI.



For all choices of x[n], y[n], and the constant α

$$\cos\left(\frac{\pi}{3}n\right) \longrightarrow \frac{3\cos\left(\frac{\pi}{3}n\right) + \frac{1}{2}\sin\left(\frac{\pi}{2}n + \frac{\pi}{5}\right)}{\text{System D}}$$

$$x[n] \qquad y[n] = 0.2y[n+1] + x[n]$$
System E

Figure P2.27