

Delay

LTIS ✓

$$x(n) \rightarrow \boxed{D_0} \rightarrow y(n) = x(n-1)$$

$$\dots 0 \ 1 \ 3 \ -1 \dots \rightarrow \boxed{D_0} \rightarrow \begin{array}{cccc} 0 & 0 & 1 & 3 \dots \\ & \swarrow & \swarrow & \swarrow \\ & & & \end{array}$$

$$0 \ 0 \ 1 \ 3 \ -1 \rightarrow \boxed{D_0} \rightarrow 0 \ 0 \ 0 \ 1 \ 3$$

Predict The Future

$$x(n) \rightarrow \boxed{PTF} \rightarrow y(n) = x(n+1)$$

$$0 \ 1 \ 3 \ -1 \rightarrow \boxed{PTF} \rightarrow 1 \ 3 \ -1 \ 0$$