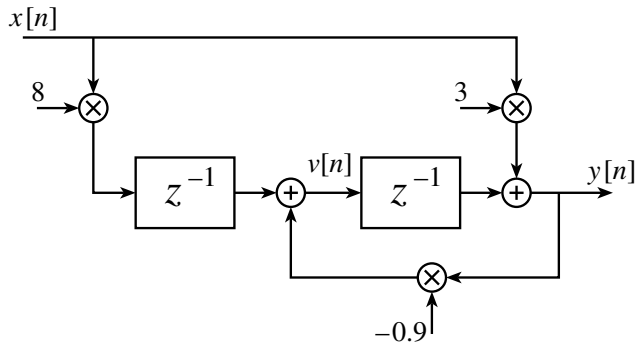


PROBLEM:

The following signal flow graph structure defines a linear time-invariant system:



- Write the two difference equations defined by the signal flow graph—one for $y[n]$ and one for $v[n]$.
- Determine the z -transform system function $H(z)$ from the input $x[n]$ to the output $y[n]$.