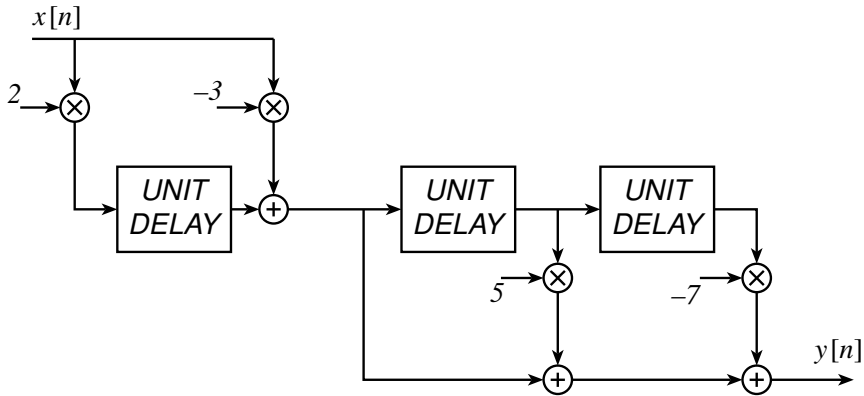## PROBLEM:

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

Write a simple formula for the system function $H(z)$ or the difference equation defined by the signal flow graph. Notice that the flow graph is naturally partitioned into the cascade of two filters.