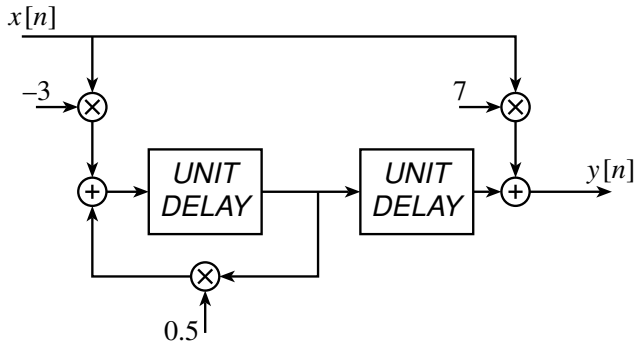## PROBLEM:

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

(a) Write a simple formula for the difference equation defined by the signal flow graph. Since this is not a standard form, you must write the equations for signals at each node of the signal flow graph.

(b) Write a few lines of MATLAB code that will generate the first 20 values of the impulse response of the system.