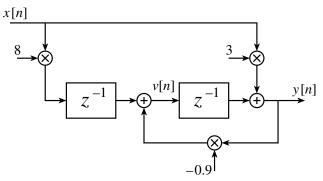
PROBLEM:

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



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

McClellan, Schafer and Yoder, Signal Processing First, ISBN 0-13-065562-7. Prentice Hall, Upper Saddle River, NJ 07458. © 2003 Pearson Education, Inc.