**EXERCISE 8.3:** The IDFT can also be expressed as a matrix-vector product. Write out the typical entry of the  $N \times N$  IDFT matrix, and then use MATLAB to create a  $6 \times 6$  IDFT matrix. Check your work by multiplying the IDFT matrix by the DFT matrix (in MATLAB). Explain why the expected result should be an identity matrix.

McClellan, Schafer, and Yoder, *DSP First, 2e*, ISBN 0-13-065562-7. Prentice Hall, Upper Saddle River, NJ 07458. ©2016 Pearson Education, Inc.

