show that the signal x[n] obtained via the IDFT is periodic with period N. McClellan, Schafer, and Yoder, DSP First, 2e, ISBN 0-13-065562-7.

Prentice Hall, Upper Saddle River, NJ 07458, ©2016 Pearson Education, Inc.

EXERCISE 8.10: Show that the IDFT of X[k] defined in Exercise 8.9 gives x[n] in (8.43). Furthermore,