13.2-1 Suppose that we have numbers between 1 and 1000 in a binary search tree and want to search for the number 363. Which of the following sequences could not be the sequence of nodes examined?
(a) 2, 252, 401, 398, 330, 344, 397, 363. (b) 924, 220, 911, 244, 898, 258, 362, 363. (c) 925, 202, 911, 240, 912, 245, 363. (d) 2, 399, 387, 219, 266, 382, 381, 278, 363. (e) 935, 278, 347, 621, 299, 392, 358, 363.

13.3-1 Give a recursive version of the TREE-INSERT procedure.

14.1-3 Show that the longest simple path from a node $x$ in a red-black tree to a descendant leaf has length at most twice that of the shortest simple path from node $x$ to a descendant leaf.

14.3-4 Suppose that the black-height of each of the subtrees $\alpha$, $\beta$, $\gamma$, $\delta$, $\epsilon$ in Figures 14.5 and 14.6 is $k$. Label each node in each figure with its black-height to verify that property 4 is preserved by the indicated transformation.