



**FIGURE 14.1** The SkipList class: This example has four levels of lists. Each node has a key, and the head and tail sentinels have  $\pm\infty$  keys. The list at level  $i$  is a shortcut where each reference skips over  $2^i$  nodes of the next lower level list. For example, at level 3, references skip  $2^3$  nodes; at level 2,  $2^2$  nodes, and so on.