**11.** $O(\log\ n)$

**13.** $O(n^{\log_3 2})$

**13.** $O(n^{\log_3 2})$ **15.** 5 **17.** **a)** *Basis step:* If the sequence has just one element, then the one person on the list is the winner. *Recursive step:* Divide the list into two parts—the first half and the second half—as equally as possible. Apply the algorithm recursively to each half to come up with at most two names. Then run through the entire list to count the number of occurrences of each of those names to decide which, if either, is the winner. **b)** $O(n \log n)$ **19.** **a)** $f(n) = f(n/2) + 2$

ther, is the winner. **b)** $O(n \log n)$ **19.** **a)** $f(n) = f(n/2) + 2$
**b)** $O(\log n)$ **21.** **a)** 7 **b)** $O(\log n)$

**21.** **a)** 7 **b)** $O(\log n)$

**35.** $O(n^{\log_4 5})$

**37.** $O(n^3)$