

Algorithm Design
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Solution of Exercise R-5.4

1. $T(n)$ is $O(n)$ (case 1).
2. $T(n)$ is $O(n^3)$ (case 1).
3. $T(n)$ is $O(n^4 \log^5 n)$ (case 2).
4. $T(n)$ is $O(n^{\log_3 7})$ (case 1).
5. $T(n)$ is $O(n^3 \log n)$ (case 3).