

Algorithm sameElements(A, B)

Input: Two sequences A and B of n elements each

Output: True if A and B contain the same set of elements, False otherwise

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1. A_sorted := Sort(A)
2. B_sorted := Sort(B)

3. for i from 0 to n - 1 do
    if A_sorted[i] ≠ B_sorted[i] then
        return False
4. return True
```

////////R-5.4////////

$T(n) = \Theta(n)$ .

$T(n) = \Theta(n^3)$ .

$T(n) = \Theta(n^4 \cdot \log 5n)$ .

$T(n) = \Theta(n^{1.77})$ .

$T(n) = \Theta(n^3 \log n)$ .