MTH 4320 Homework 9

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Problem 1

Solution. The time complexity of the algorithm is $O(n^2)$. ■

Problem 2

Solution. Let $S[i, j]$ be the length of the longest palindrome in substring S starting with the ith letter and ending with jth letter. We have

$$S[i, i] = 1$$

The time complexity of the algorithm is $O(n^2)$. ■

Problem 3

Solution. The time complexity of the algorithm is $O(n^2)$. ■