Student No: [redacted]

Name- Surname: ALGORITHM ANALYSIS MIDTERM EXAM 04.11.2019

1) (40 pts) What is the "worst case analysis" of the function f(n) = 100n + 5 for different values of n?

2) (30 pts) Solve the problem of finding the distance between the two closest numbers in the array below with 3 different methods and compare their efficiencies.

3	8	4	12

3) (30 pts) Explain the definitons below.

a) Np Problem

b) Algorithm Analysis

c) Approximate Solution

d) Divide and Conquer

e) Average Case

You have 60 minutes.
Good Luck.
Assoc. Prof. Dr. Rıza SAMLI