Mathematical Statistics 2017/2018, Homework 2

Name and Surname ..... Student's number .....

In the problems below, please use the following: as k – the sum of digits in your student's number; as m – the largest digit in your student's number; and as n – the smallest digit in your student's number plus 1. Please write down the solutions (transformations, substitutions etc.), and additionally provide the final answer in the space specified (the answer should be a number in decimal notation, rounded to four digits).

2. A group of students were interviewed and asked about their weekly expenditures on entertainment (cinemas, bars, clubs, etc.). The results are summarized in the table below:

Amount (in \$)	Number of students
$(0, 10 \cdot n]$	$n + 2$
$(10 \cdot n, 20 \cdot n]$	$m + n$
$(20 \cdot n, 30 \cdot n]$	$2k - 3$
$(30 \cdot n, 40 \cdot n]$	$k + 5$
$(40 \cdot n, 50 \cdot n]$	$m + 3n$
$(50 \cdot n, 60 \cdot n]$	m

Approximate the mean, median and mode values of entertainment expenditures for the studied group.

ANSWER: Mean: Median: Mode:

Solution: