Mth 21, Homework 4 on section 4.2
Due by Wed, Oct 4.

Please use lots of space and explain your answers, showing clearly any work you had to do. Each question is worth 3 points.

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(1) Find the mean, median and mode for this data set of highway speeds:

$$59 \quad 72 \quad 57 \quad 67 \quad 81 \quad 63 \quad 59 \quad 80 \quad 71 \quad 68$$

(2) The frequency distribution of ages of students in a class is

age x	frequency
$15 \leq x < 20$	8
$20 \leq x < 25$	5
$25 \leq x < 30$	2

Find the mean age. (Your answer should be close to 20.)

(3) Jorge scored 50, 65 and 80 on three exams. What score does he need on the fourth exam so that his average is 70?

(4) A survey asked 50 people how many films they had watched in the last week. The frequency distribution was

number of films	frequency
0	7
1	9
2	15
3	11
4	8

Find the mean, median and mode for this data set.

(5) Add a column for the relative frequency to the table in Question 4. Then answer these:

   (a) What is the 14th percentile for films watched in the last week?

   (b) What is the 62nd percentile for films watched in the last week?

(Hint: The 14th percentile means that exactly 14% of people watched less than that many films.)

(6) Suppose you scored at the 90th percentile on a test. Does that mean you did well or badly? Explain.

(It does not mean you scored 90% on the test!)

If you get stuck on a question or aren't sure if you understand it:

- Go over the relevant class notes and section in the textbook.

- Check if you get the right answer for a similar odd-numbered question in the textbook (answers at the back of the book).

- Ask me about it after class.

- Come to my office hours: Mon 11:30 - 12:30, Wed 11:30 - 12:30 in CP 317.

- Go to the Math Tutorial Lab in-person in CP 303 or online.