

(please print legibly)

Let  $U = S = \mathbb{Z}$  (the sample space is the integers).

Let the data be described as  $X_1, X_2, X_3, X_4$  (as in problem 1), as  $X_1, X_2, X_3, X_4, X_5$  (as in problem 2) etc.

1. Let the data set be  $D_1 = \{1, 2, 3, 4\}$

Find:

- A. the mode of the sample
- B. The median of the sample
- C. the arithmetic mean (sample mean) of the sample.
- D. the geometric mean of the sample.
- E. the harmonic mean of the sample.
- F. find the range

2. Let the data set be  $D_2 = \{1, 2, 2, 3, 4\}$

Find:

- A. the mode of the sample
- B. The median of the sample
- C. the arithmetic mean (sample mean) of the sample.
- D. the geometric mean of the sample.
- E. the harmonic mean of the sample.
- F. find  $\bar{X}$

3. Let the data set be  $D_3 = \{1, 2, 3, 3, 3, 4, 5, 5, 5\}$

A. draw a histogramme

Find:

- B. The median of the sample
- C. the arithmetic mean (sample mean) of the sample.
- D. the geometric mean of the sample.
- E. the harmonic mean of the sample.
- F. find the mode of the sample

4. Let the data set be defined by the following frequency table:

$X = x$	1	3	4
$f(x)$	3	1	3

A. draw a histogramme

Find:

- B. find the range
- C. the arithmetic mean (sample mean) of the sample.
- D. the geometric mean of the sample.
- E. the harmonic mean of the sample.
- F. the mode of the sample
- G. The median of the sample

5. Let the data set be  $D_4 = D_1 \cup D_2 \cup D_3$

Find:

- A. the mode of the sample
- B. The median of the sample
- C. the arithmetic mean (sample mean) of the sample.