Task 1. Consider the following sample of measurements: $2,5,7,4,5,8,3,9$. Find the:
a) range,
b) coefficient of range
c) the inter-quartile range
d) quartile coefficient of dispersion
e) variance and standard deviation,
f) coefficient of variation.

Task 2. The number of calls from motorists per day for roadside service was recorded for the month of December 2003. The results were grouped into frequency table. Find and interpret:
a) variance and standard deviation,
b) coefficient of variation.

| Range | Number of calls |
| :--- | :--- |
| $0-5$ | 2 |
| $5-10$ | 7 |
| $10-15$ | 10 |
| $15-20$ | 5 |
| $20-25$ | 1 |

Task 3. Suppose 110 children take a test, with the following results. Find and interpret:
a) variance and standard deviation,
b) coefficient of variation.

| Mark, $X$ | Frequency |
| :--- | :--- |
| 13 | 5 |
| 14 | 13 |
| 15 | 29 |
| 16 | 33 |
| 17 | 17 |
| 18 | 8 |
| 19 | 4 |
| 20 | 1 |

Task 4. (Statistica) Scientists examined weight of randomly selected women from the city of Gdynia. On the basis of the data contained in the file CharacteristicsHeight.sta perform an analysis. Find and interpret:
a) range,
b) inter-quartile range,
c) variance,
d) standard deviation,
e) coefficient of variation.

Task 5. (Statistica) Scientists examined randomly selected men from the city of Gdynia in terms of spending time on work (variable ,,work") during the week (in hours). On the basis of the data contained in the file Activities.sta perform an analysis. Find and interpret:
a) range,
b) inter-quartile range,
c) variance,
d) standard deviation,
e) coefficient of variation.

