

Tasks

Task. 1. It has been suggested that smoking cigarettes and drinking coffee affect the course of the illness. Scientists randomly selected 21 patients from the population of patients with the chosen disease. They carried out a survey. Drinking coffee (Co) and smoking cigarettes (Ci) were recorded using following scale: large amounts (1), medium (2), little (3), never used (4). The results are given in the table below. Construct:

- a) table of frequency and histogram of smokers,
- b) table of frequency and histogram of coffee drinkers,

M/F	M	M	F	M	F	M	M	F	M	F	F	M	F	M	M	F	F	F	F	M	M
Ci	1	1	4	1	3	1	1	1	1	2	1	1	1	1	1	4	4	1	1	1	2
Co	1	1	1	1	1	1	2	1	3	4	4	1	2	1	1	1	1	1	3	2	2

Hint:

No.	Frequency	Relative frequency [%]	Cumulative frequency	Cumulative relative frequency [%]
1				
2				
3				
4				

Task 2. Scientists randomly selected sample of 50 employees. Employees earn the following value of the monthly wage [zł]. According to the table, create a frequency table with equal class intervals.

2780,4	1594,98	3581,58	1627,03	926,42	584,7	845,19	874,15	828,47	1439,54
870,77	1391,29	1061,59	779,83	1335,32	672,63	625,46	1290,39	1142,24	1164,01
531,45	1636,71	917,1	699,44	2003,43	1242,03	2078,8	1840,19	1064,19	2026,11
2728,69	636,48	1466,29	756,03	996,96	872,02	460	846,85	1329,73	1398,16
1387,53	1316,37	798,04	1358,84	1800,05	1359,17	2001,78	889,81	1259,7	1302,22

Hint:

Range	Frequency	Relative frequency [%]	Cumulative frequency	Cumulative relative frequency [%]

Statistica

Task 3. On the basis of the data contained in the file Characteristics.sta designate:

- a) percentage of people with red hair,
- b) histogram of hair colour,
- c) percentage of people with blue eyes,
- d) histogram of eye colour.

Task 4. On the basis of the data contained in the file Sports.sta designate:

- a) percentage of people who „always” play basketball,
- b) percentage of people who „sometimes” swim,
- c) histogram of baseball,
- d) histogram of skiing,
- e) number of people who „usually” play football.

Task 5. On the basis of the data contained in the file Characteristics.sta designate:

- a) frequency table with equal intervals (Weight) and histogram,
- b) frequency table with 5 equal intervals (Weight) and histogram,
- c) frequency table with equal intervals and class width 3 (Weight) and histogram

Task 6. On the basis of the data contained in the file Characteristics.sta designate:

- a) Frequency table with equal intervals (Height) and histogram,
- b) Frequency table with 4 equal intervals (Height) and histogram,
- c) Frequency table with equal intervals and class width 5 kg (Height) and histogram.