

## Serie 4

**Exercise 1:** The following frequency table contains the number of goals scored by teams in the football league last season.

Number of goals	1	2	3	4	5	6	7
ni	2	5	2	13	16	9	2

1. Calculate :

- Mean, Mode, Median, Geometric mean, Harmonic mean.
- Quartiles, Deciles (D2 and D8), Percentiles (P20 and P70.)

**Exercise 2:** The following table shows the weight distribution of twenty employees in one institution

weight	50-40	60-50	70-60	80-70	90-80
Number of employees	4	3	7	4	2

1. Calculate Mean
2. Find the Mode mathematically an graphically.
3. Find the Median mathematically an graphically.

**Exercise 3 :** The following table shows the ages distribution of 100 employees in a factory.

ages	16-20	20-24	24-28	28-32	32-36	36-40	40-44	44-48	48-52	52-56	56-60
Number of employees	1	3	8	12	16	20	16	12	8	3	1

1. What is the studied variable? And what type?
2. What is the appropriate representation of this data? What is your observation about graphical presentation of this distribution ?
3. Calculate :Mean, Mode, Median, Geometric mean, Harmonic mean.
4. Calculate :Quartiles, Deciles (D2 and D8), Percentiles (P20 and P90.)

**Exercise 3 :** Assuming we deposited 20.000 dinars in the bank for 9 years, divided as follows : the interest rate was 5% for the first 4 years, the nit dropped to 3% for the 5th and 6th years, and increased to 4% during the last 3 years.

What is the average interest rate over the 9 years.