Abdelhafidh **Boussouf** Mila University Center
Department of Mechanical Engineering
Module: Probability and Statistics (PST)
2nd Year EM, GM

Worksheet : N°4

Exercise 1:

The number of matches contained in 20 boxes was recorded, and the results are as follows:

40, 42, 32, 38, 40, 48, 30, 38,36, 40, 34, 40, 34, 38, 40, 42, 44, 36, 42, 40.

1. Give the statistical table.
2. Can we represent this variable with a histogram?
3. Graph this variable using frequencies and plot the polygon of frequencies.

Exercise 2:

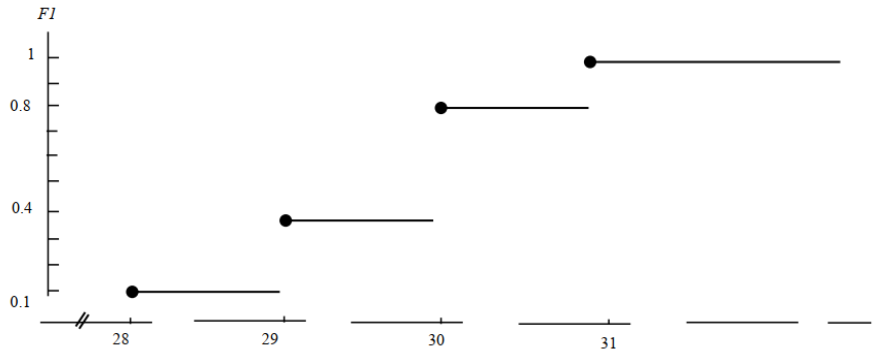
The age distribution of the population of a city is as follows:

4. Give the statistical table.
5. Make a graphical representation of this distribution, and draw the polygon of counts.

Classes	[0-6[	[6-12[	[12-19[	[19-31[	[31-51[	[51-65[	[65-90]
Counts $x10^3$	20	15	10	13	17	8	4

Exercise 3:

- Give the distribution of partial frequencies and counts corresponding to the graph of the following distribution of 200 tubes.



Exercise 4:

1. Complete the following statistical table

2. Plot the increasing cumulative curve.

Classes	**[10-20[**	**[20-30[**	**[30-40[**	**[40-60[**	**[60-80[**	**Total**
Ci						
fi	0.08	0.21				
Fi			0.55	0.86		

Exercise 5:

The following table was obtained:

1/ Calculate the frequencies and cumulative frequencies.

2/ Give the statistical table.

3/ Represent the cumulative curve.

xi	0	1	2	3	4
ni	10	20	50	80	40