

Graphical presentation of the quantity data :

Graphical presentation of the data is one of the methods that can be used to describe the data .
The following charts show the different forms .

- 1.Histogram : This is a graphic contiguous columns, where the vertical axis represents frequencies while variable values (limits of categories) on the horizontal axis and height column is represented is a category repetitions and the length of its base is the length of category.

To draw a histogram must be follow these steps :

- 1.To draw two perpendicular axes, the vertical axes is represented repetitions and horizontal axes is represents weights .
- 2.Every category represents the column height is category repetitions and the length of its base represents the length of category.

Example 1.The frequency distribution for the weights sample of poultry (gm) are size of 100 and were chosen from poultry farm after 45 days .

Weight	600 -	620 -	640 -	660 -	680 -	700 - 720	Sum
No. of poultry	10	15	20	25	20	10	100

Find :

- A. Length of the category ?
- B. Draw the histogram ?
- C. Draw the relative of repetition histogram and then commented on the drawing ?

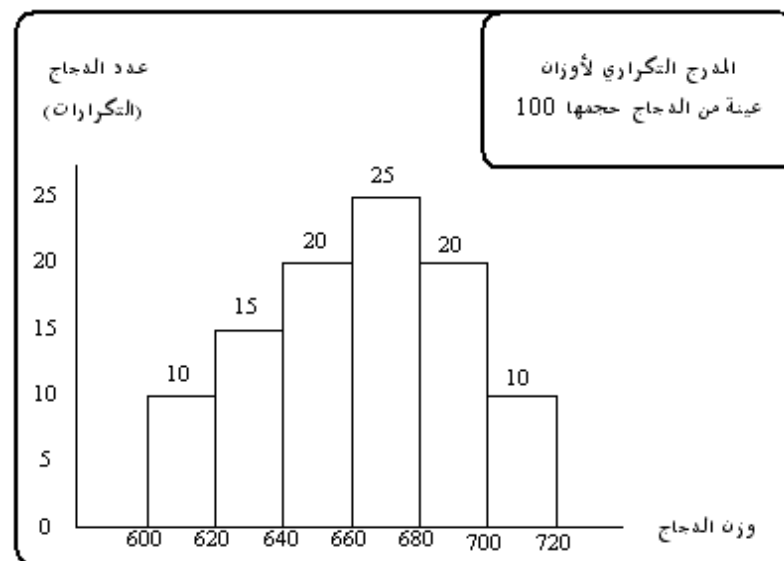
Solution :

- A. Length of category = upper of category - lower of category.

$$L = 620 - 600 = 20 .$$

- B. histogram .

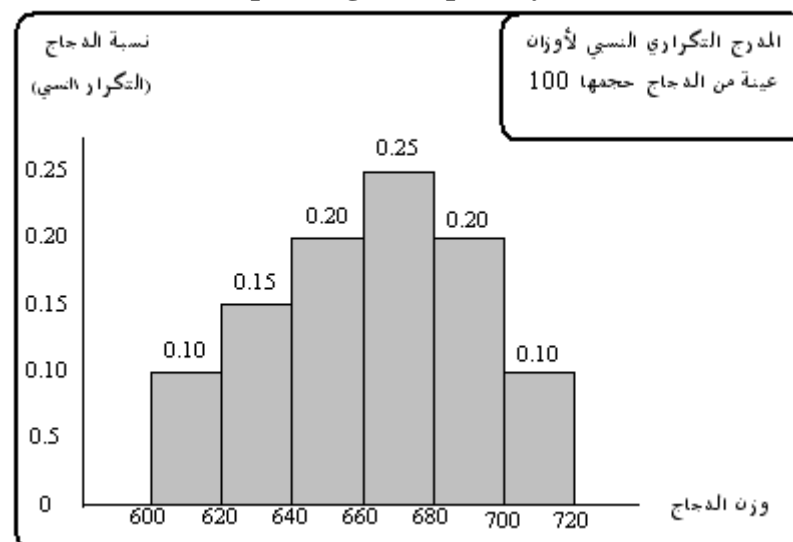
Figure 1. Histogram of the sample weights of poultry size for 100 chickens .



C. relative histogram .

weight	600 -	620 -	640 -	660 -	680 -	700 - 720	Sum =
No.of poultry	10	15	20	25	20	10	100
Relative frequency	0.10	0.15	0.20	0.25	0.20	0.10	1.00

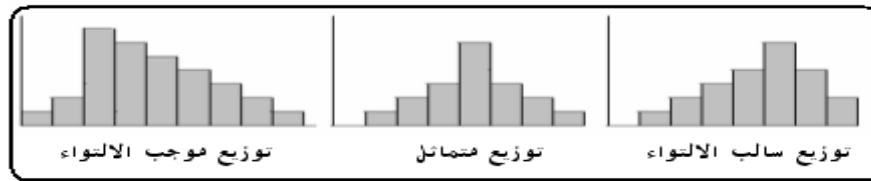
Figure 2. Histogram relative of the sample weights of poultry size for 100 chickens .



We notes from the above figure :

1. We notes that 25% of the chicken are weights ranges between 660-680 grams is the highest rate .
2. The shape is quirky form to the left which shows that the distribution of weights chicken are minus sprains.

D. You can know the data distribution , as in the following shapes :



2. Recursive Polygon : It is the graphical representation of where the vertical axis represents the duplicates while categories centers on the horizontal axis. and then connection between the coordinates with broken lines are form of polygon .

Since the category Center is the value that lies in the middle class and are calculated by applying the following equation:

Category center (midpoint) = (lower limit of category + upper limit of category) / 2 .

Example 2. : Use the following table data to draw recursive polygon .

Categories (weights of poultry)	Repetition (No. of poultry)	Midpoint
600 – 620	10	
620 – 640	15	
640 – 660	20	
660 – 680	25	
680 – 700	20	
700 – 720	10	
Sum	100	

Find :

- Find categories centers ?
- Draw the polygon Recurring ?
- Draw curved recursive ?

Solution :

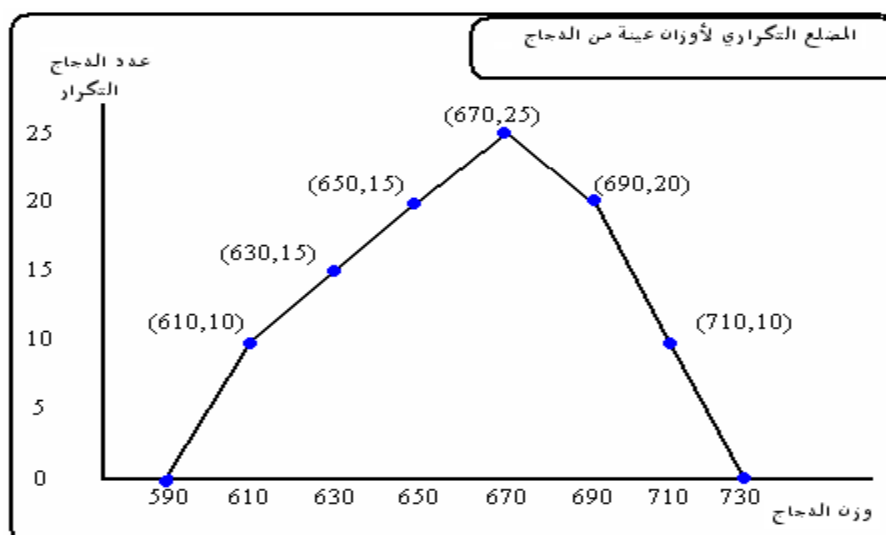
Categories (weights of poultry)	Repetition (No. of poultry)	Midpoint
600 – 620	10	610
620 – 640	15	630
640 – 660	20	650
660 – 680	25	670
680 – 700	20	690
700 – 720	10	710
Sum	100	

So the coordinates point are :

Midpoint (X)	590	610	630	650	670	690	710	730
Repetition (Y)	0	10	15	20	25	20	10	0

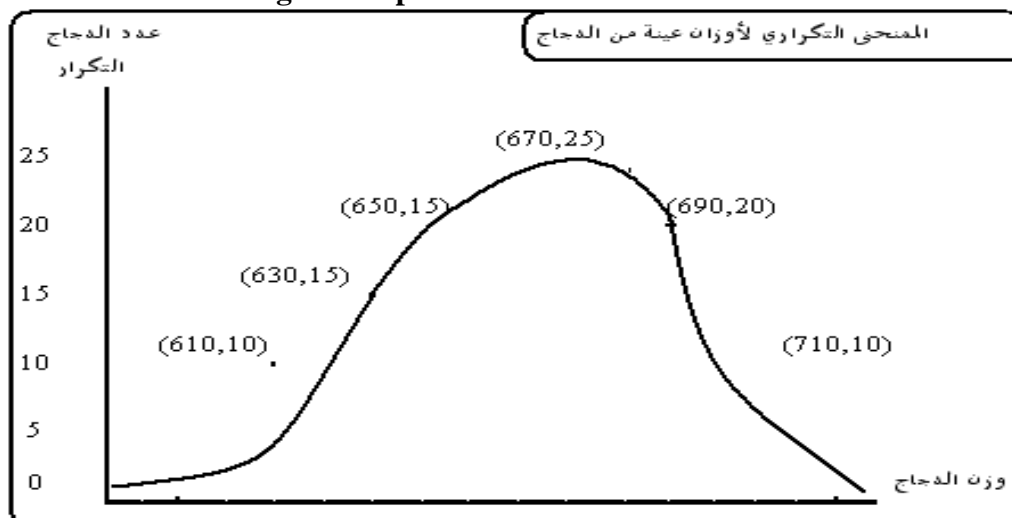
B.Draw recursive polygon .

Figure 4. Recurrent polygon of weights sample for size 100 of chicken .



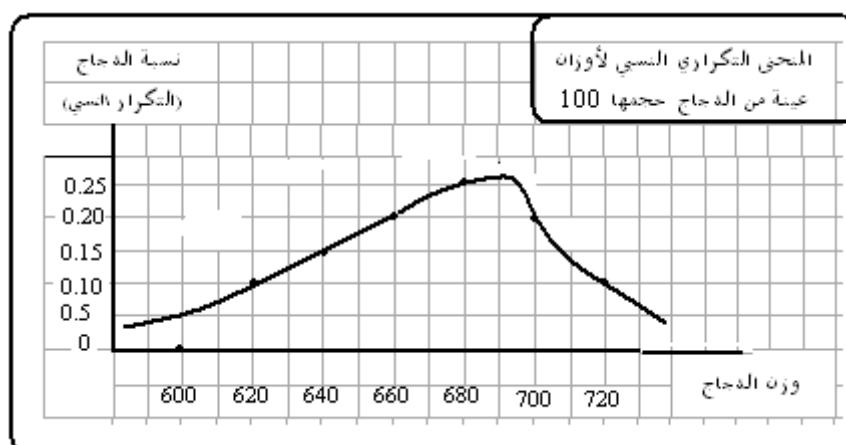
C. Draw a curved recursive .

Figure 5. Curved recursive of weights sample for size 100 of chicken .



also it can to draw relative iterative curve .

Figure 6. Relative iterative curve of weights sample for size 100 of chicken .



The repetitive curve above is positive torsion . There are different forms of the relative repetition curve that indicating to data distribution into following :

