




**Objective:** Histograms and Cumulative Frequency Histograms

**Homework ST-3** – NYA p.304 #1 – 8, p.771 #1, 2

**Do Now:** Find the five-number summary: 1, 1, 3, 5, 7, 10, 10, 12, 15, 17, 22

**Exam Prep:** The median of a set of data is member of the set.

- A) always true    B) sometimes true    C) never true



At the end of the day if you think there is no difference between a histogram and a bar graph, I shall kill you and then consume the soul of your pet.

**Tally charts** are used to determine frequency, or how often something happens.

A frequency table shows categories of things with a count or tally.

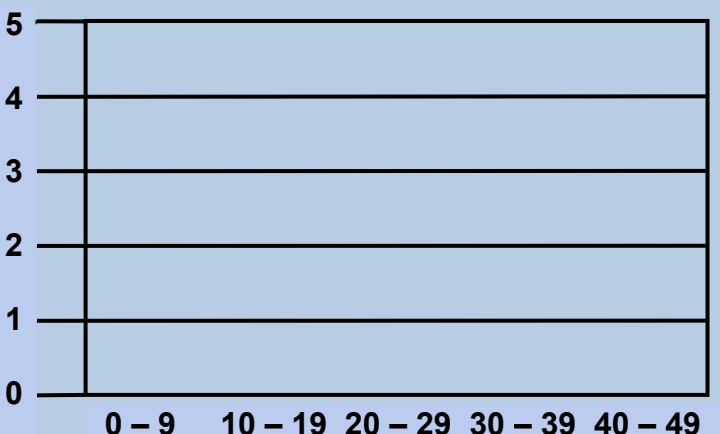
This table shows car colors in a parking lot.

Color	Tally	Frequency
Blue	### II	7
White	IIII	4
Yellow	### IIII	9
Red	### II	7

**Histograms** are useful for equal intervals. They are NOT bar graphs!

**Properties of a Histogram**

- No space between bars
- Equal intervals on bottom (x-axis)
- Frequency is on the left (y-axis)
- Usually created from data in a frequency table



**Make a frequency table and histogram.**

4, 1, 7, 15, 3, 8, 19, 20,  
16, 4, 2, 5, 7, 15, 5, 7, 9

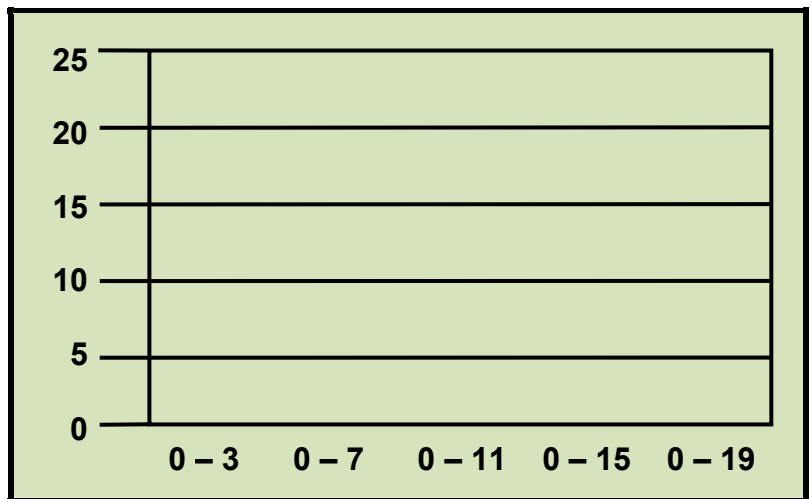
Histograms can be described by their shape. This is important for interpreting data. Three descriptive types are shown below.



A cumulative frequency histogram has successive columns or intervals that include all previous values. Therefore, the last interval contains all values and the bars have a “stacked” appearance.

Regular	
Interval	F
0 – 3	3
4 – 7	10
8 – 11	7
12 – 15	4
16 – 19	1

Cumulative	
Interval	CF
0 – 3	3
0 – 7	13
0 – 11	20
0 – 15	24
0 – 19	25



**Practice** Make a cumulative frequency histogram using these bowling scores.  
 57, 61, 82, 105, 106, 109, 120, 151, 180, 268, 295  
*Note: Use 6 intervals for this exercise.*

Interval	CF
0 –	
0 –	
0 –	
0 –	
0 –	
0 –	

