

## Warm up

1. What is the mean, median and range of both MIN (minutes played) and PTS (points) for the Lakers team from Friday night?

### Los Angeles Lakers

STARTERS	MIN	PTS
Wesley Johnson, SF	36	12
Pau Gasol, C	39	22
Kendall Marshall, PG	19	0
Jodie Meeks, SG	33	22
Kent Bazemore, SG	27	12
Jordan Farmar, PG	29	30
MarShon Brooks, SG	26	23

2. What would happen to the mean, median, & range if the outlier were removed from both data sets.

3. Which player had the most points per minute for the game?

Math 1

## 12.2 Frequency and Histograms

Unit 3

**Frequency:** The number of data values in an interval  
**Frequency Table:** Groups a set of data values into intervals and shows the number for each interval  
• Frequency tables do not overlap, do not have any gaps, and are usually of equal size  
**Histogram:** A graph that can display data from a frequency table.  
**Cumulative Frequency Tables:** Shows the number of values that lie in a \_\_\_\_\_ a given interval.

### Making a Frequency Table

The numbers of home runs by the batters in a local home run derby are listed below. What is a frequency table that represents the data?  
7, 17, 14, 2, 7, 9, 5, 12, 3, 10, 4, 12, 7, 15

Home Runs	Tally	Frequency
2-5		4
6-9		4
10-13		3
14-17		3

### Making a Histogram

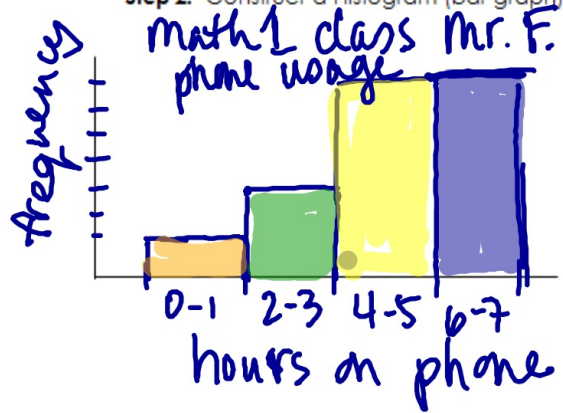
Think about the amount of hours you spend on your phone (homework, apps, texting, Snapchatting, etc.) and write it down. We will create a frequency table and histogram with the class's data.

**Step 1:** Create a frequency table.

Hours of Phone	Frequency
0-1	1
2-3	3
4-5	7
6-7	7
8-9	0

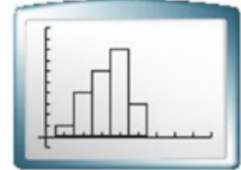
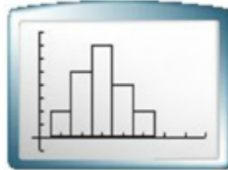
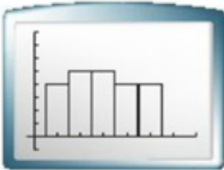
0-1 1  
0-3 4  
0-5 11  
0-7 18  
0-9 18

**Step 2:** Construct a Histogram (bar graph)



### Shapes of Histograms

You can describe histograms by their shape. Three different types are listed below.



**Making a Cumulative Frequency Table**

The numbers of text messages sent on one day by different students are shown below. What is the cumulative frequency table that represents the data? *1, 3, 1, 3, 1, 7, 1, 5, 2, 3, 2, 1, 2, 1, 4, 1, 2, 1, 1*

# of Texts	0-7	8-15	16-23	24-31	32-39	40-47	48-55
Frequency	11	2	3	2	1	1	1
Cummulative Frequency	11	13	16	18	19	20	21

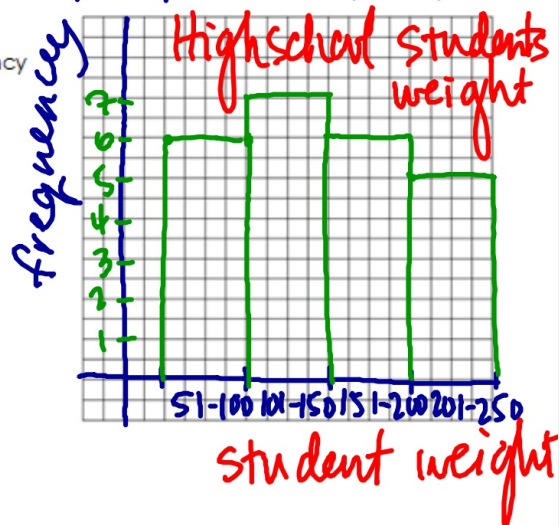
**Practice:**

1. The following data consists of the weights, in pounds, of 24 high school students:

*195, 206, 120, 98, 150, 210, 195, 106, 195, 108, 180, 212, 104, 195, 100, 216, 97, 206, 116, 142, 100, 135, 98, 160*

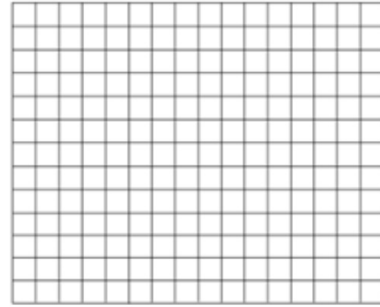
a) Using this data, complete the accompanying cumulative frequency table and construct a frequency histogram on the grid below.

Interval	Frequency	Cumulative Frequency
51-100	6	6
101-150	7	13
151-200	6	19
201-250	5	24

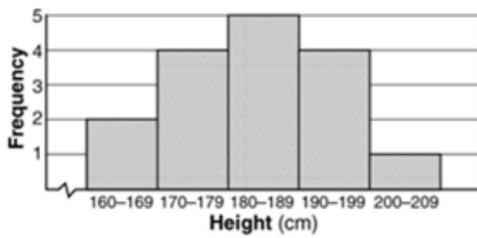


2. The scores on a mathematics tests were 70, 55, 61, 80, 85, 72, 65, 40, 74, 68, and 84. Complete the accompanying table, and use the table to construct a frequency histogram for these scores.

Score	Tally	Frequency
40-49		
50-59		
60-69		
70-79		
80-89		



3. The accompanying histogram shows the heights of the students in Kyra's health class.



What is the total number of students in the class?

- a) 15  
 b) 209  
 c) 16  
 d) 5

4. Which one of the following histograms represents the data in the table below?

Interval	Frequency
4-8	8
9-13	3
14-18	10
19-23	5

