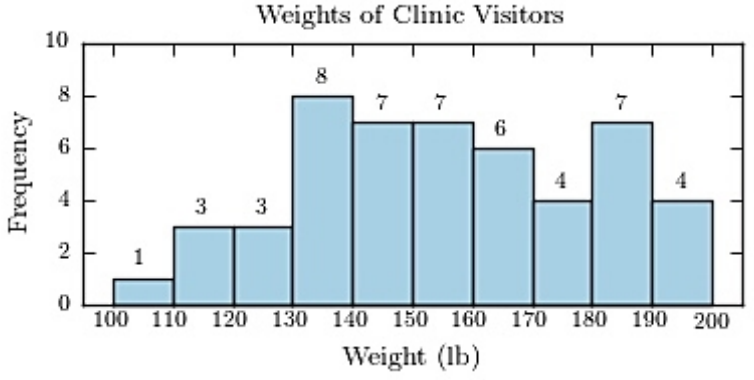
1) The following frequency distribution presents the weights in pounds (lb) of a sample of visitors to a health clinic. 1) B

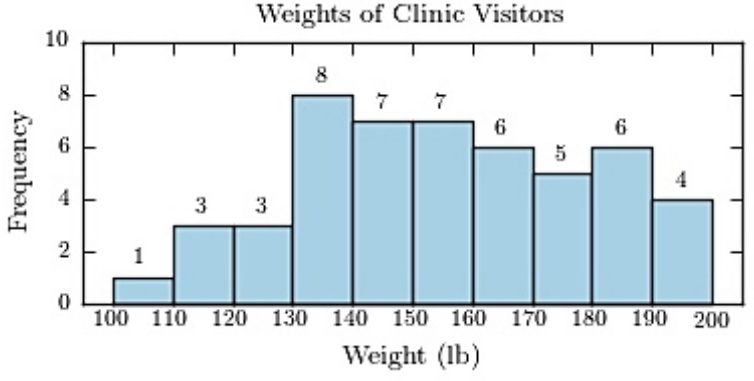
Weights of Clinic Visitors	
Weight (lb)	Frequency
100–109	1
110–119	3
120–129	3
130–139	8
140–149	7
150–159	7
160–169	6
170–179	5
180–189	6
190–199	4

Construct a frequency histogram.

A)



B)



Compare the given frequencies on top of the bars: Only Histogram B is correct

2) Thirty households were surveyed for the number of televisions in each home. Following are the results. 2) A

2	2	0	1	1	2	0	0	5	2
4	4	2	1	0	0	0	0	0	0
0	2	0	0	3	1	1	1	0	0

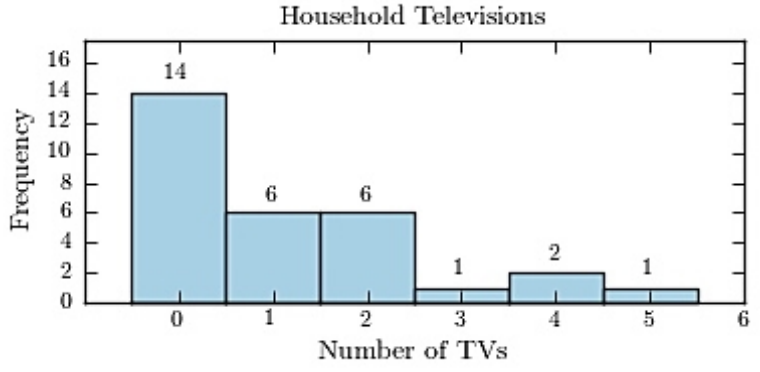
Create a count table:

```
data
 0  1  2  3  4  5
14  6  6  1  2  1
```

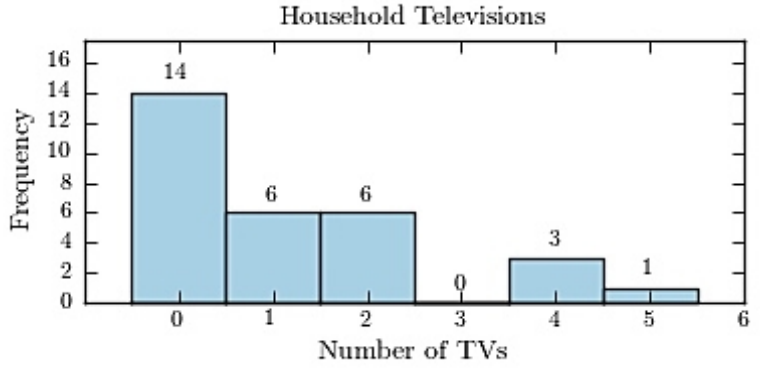
Construct a frequency histogram.

A)

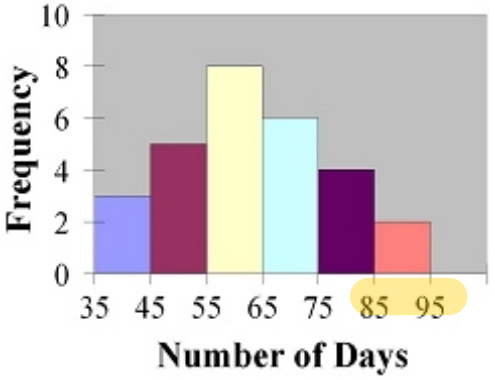
The frequencies correspond to Hist in A



B)

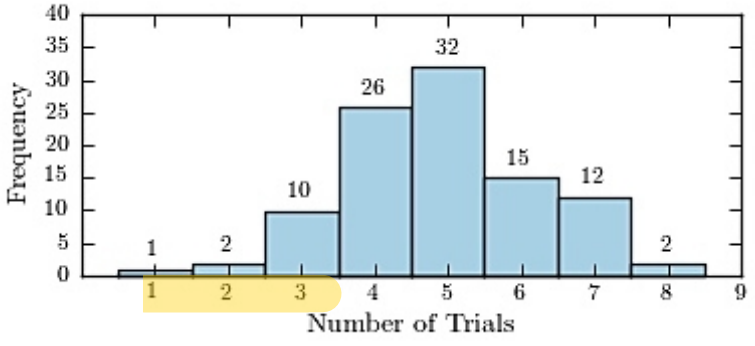


3) Find the class with the least number of data values. 3) B



A) 55-65 B) 85-95 C) 65-75 D) 75-85

4) One hundred students are shown an eight-digit number on a piece of cardboard for three seconds and are asked to then recite the number from memory. The process is repeated until the student accurately recites the entire number from memory. The following histogram presents the number of trials it took each student to memorize the number. 4) C

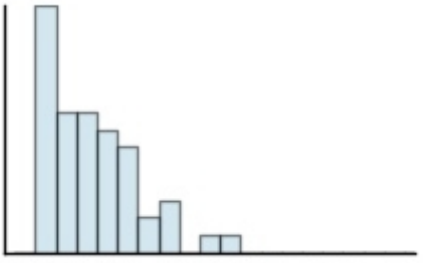


1 in 1 trial; 2 in 2 and 10 in 3 for a total of 13.

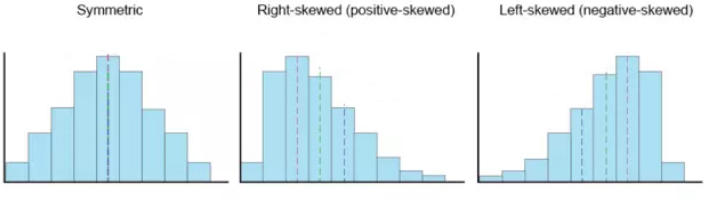
How many students memorized the number in three trials or less?

A) 87 B) 3 C) 13 D) 17

5) Classify the histogram as skewed to the left, skewed to the right, or approximately symmetric. 5) B

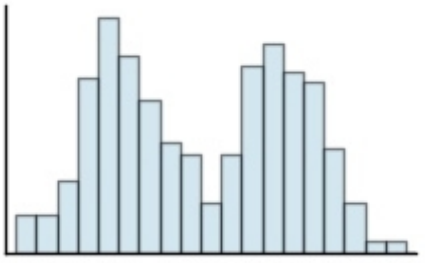


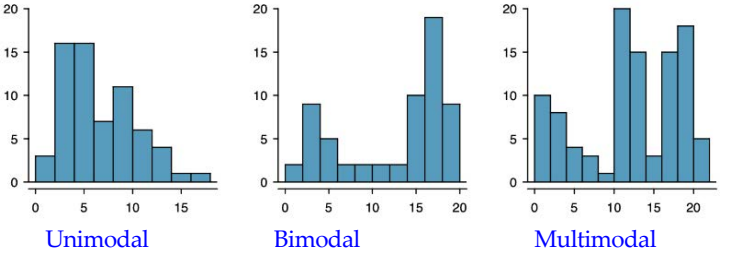
Summary of all three: left skewed, right skewed and symmetrical histograms



A) skewed to the left
B) skewed to the right
C) approximately symmetric

6) Classify the histogram as unimodal or bimodal. 6) A





A) bimodal

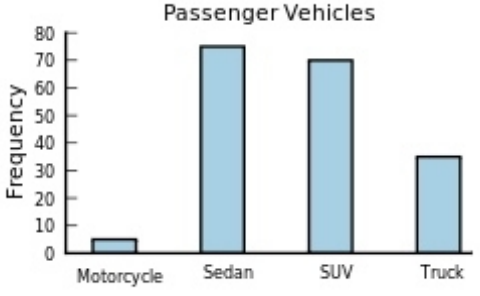
B) unimodal

7) The following frequency distribution presents the frequency of passenger vehicles that pass through a certain intersection from 8:00 AM to 9:00 AM on a particular day. 7) A

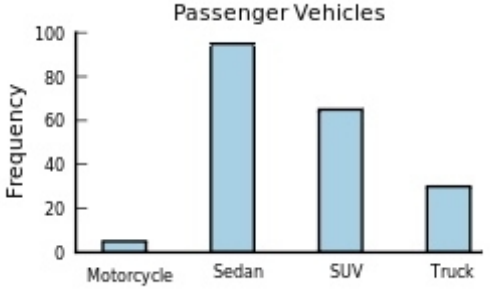
Vehicle Type	Frequency
Motorcycle	5
Sedan	75
SUV	70
Truck	35

Construct a frequency bar graph for the data.

A)



B)



Compare the bars' height to the given frequencies: only A is correct

8) A stem and leaf plot has the advantage over a grouped frequency distribution of retaining the actual data while still showing them in graphical form. 8) B

A) False B) True

A Stem and Leaf Plot is a special table where each data value is split into a stem (the first digit or digits) and a leaf, the last digit.

9) The scores on a recent statistics exam are shown below. Construct a stem and leaf plot for the data. 9) B

98, 73, 64, 69, 86, 89, 77, 86, 91, 73

A)

6	4 9
7	3 7 3
8	6 9 6
9	8 1

B)

6	4 9
7	3 3 7
8	6 6 9
9	1 8

Both stem-leaf plots include the given data values. Only B is correct because for the 70s, the 80s and 90s only B keeps the "leaves" in ascending order.

10) Construct a stem-and-leaf plot for the following data. 10) D

23	43	40	55	37	51	42	32	48	36
39	35	30	40	21	23	34	31	22	14

A)

1	4
2	1233
3	0245679
4	001238
5	15

B)

1	4
2	1233
3	01245679
4	00238
5	1
6	5

C)

1	4
2	1233
3	1245679
4	000238
5	15

D)

1	4
2	1233
3	01245679
4	00238
5	15

The best strategy to construct a stem-leaf plot is sorting the values in ascending order:

14, 21, 22, 23, 23, 30, 31, 32, 34, 35, 36, 37, 39, 40, 40, 42, 43, 48, 51, 55

```
The decimal point is 1 digit(s) to the right of the |

1 | 4
2 | 1233
3 | 01245679
4 | 00238
5 | 15
```