Center #1 – Make a stem-and-leaf plot of the data. Then find the mean, median, mode, range, and IQR. Round to the nearest tenth if necessary.

Hats Sold Each Day			
5	18	12	15
21	30	8	12
13	9	14	25

Mean: _____

Median: _____

Mode: _____

Range: _____

IQR: _____

Center #2 – Display the data in a histogram.

Heights of Gymnasts	
Heights (in.)	Frequency
50–54	1
55–59	8
60–64	5
65–69	2

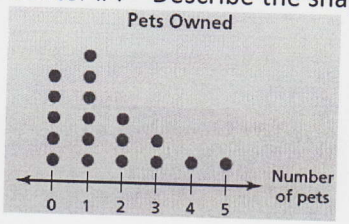
Minutes Studied	
Minutes	Frequency
0–19	5
20–39	9
40–59	12
60–79	3

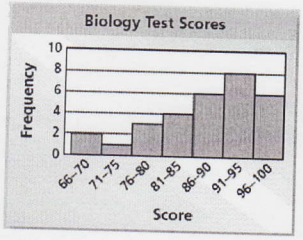
Center #3 – Make a box and whisker plot for the data.

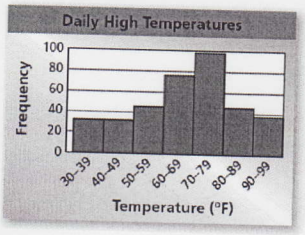
Ages of volunteers at a hospital
14, 17, 20, 16, 17, 14, 21, 18

Masses (in kilograms) of lions
120, 200, 180, 150, 200, 200, 230, 160

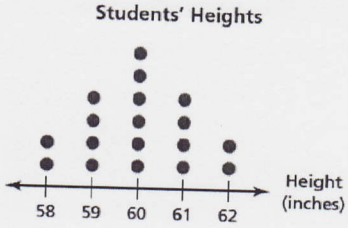
Center #4 – Describe the shape of each distribution.







Center #5 – Choose the most appropriate measure to describe the center and the variation. Then find the measures you chose.



Center #6 – Make a box and whisker plot comparing the temperatures in New York and Miami.

New York – 70, 74, 82, 79, 85, 68, 82, 64, 76

Miami – 84, 87, 92, 80, 94, 79, 87, 74, 86

Center #1 – Make a stem-and-leaf plot of the data. Then find the mean, median, mode, range, and IQR. Round to the nearest tenth if necessary.

Hats Sold Each Day			
5	18	12	15
21	30	8	12
13	9	14	25

0	5 8 9
1	2 2 3 4 5 8
2	1 5
3	0

Key 1|2 = 12 hats

182 ÷ 12 = 15.2

5, 8, 9, 12, 12, 13, 14, 15, 18, 21, 25, 30

10.5 13.5 19.5

Mean: 15.2

Median: 13.5

Mode: 12

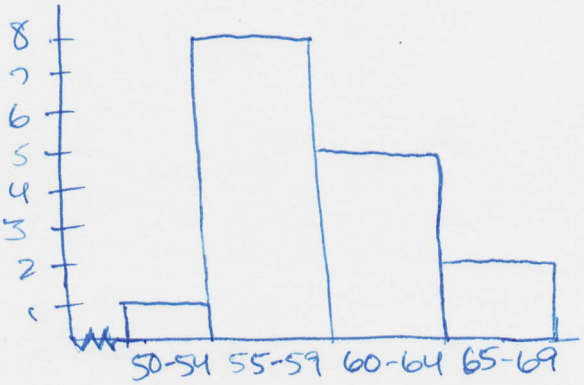
Range: 25 30 − 5 = 25

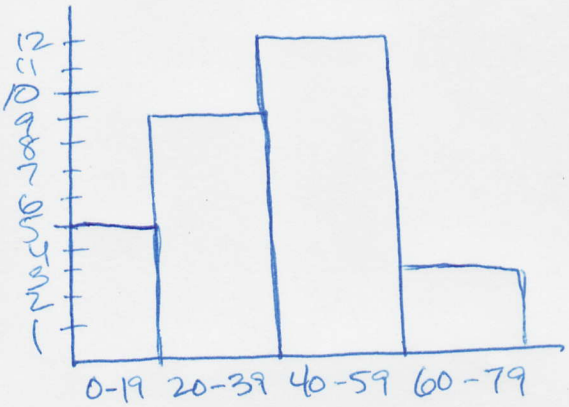
IQR: 9 19.5 − 10.5

Center #2 – Display the data in a histogram.

Heights of Gymnasts	
Heights (in.)	Frequency
50–54	1
55–59	8
60–64	5
65–69	2

Minutes Studied	
Minutes	Frequency
0–19	5
20–39	9
40–59	12
60–79	3





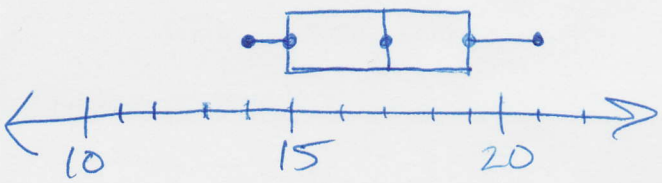
Center #3 – Make a box and whisker plot for the data.

Ages of volunteers at a hospital

14, 17, 20, 16, 17, 14, 21, 18

14, 14, 16, 17, 17, 18, 20, 21

15 17 19

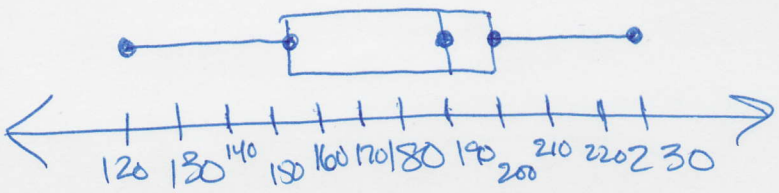


Masses (in kilograms) of lions

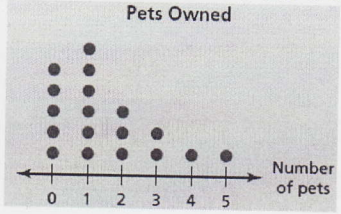
120, 200, 180, 150, 200, 200, 230, 160

120, 150, 160, 180, 200, 200, 200, 230

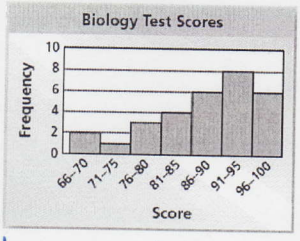
155 190 200



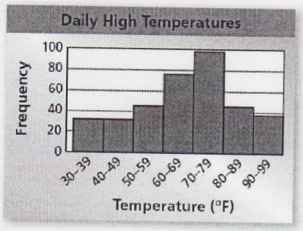
Center #4 – Describe the shape of each distribution.



More data on the left. Tail to the right.
Skewed right

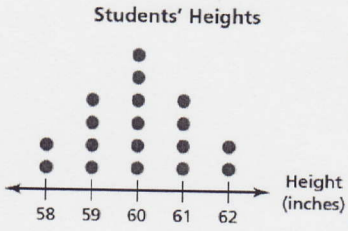


More data on right, tail to the left.
Skewed left



More data on right, tail to the left.
Skewed left

Center #5 – Choose the most appropriate measure to describe the center and the variation.
Then find the measures you chose. Symmetrical so use mean and MAD.



$58+58+59+59+59+59+60+60+60+60+60+60+61+61+61+61+62+62 = 1080 \div 18$ Mean = 60

MAD

$2+2+1+1+1+1+0+0+0+0+0+0+0+1+1+1+1+2+2 = 16 \div 18$

$\frac{16}{18} = \frac{8}{9}$ $9\overline{)8.0}$ $.8888$ MAD = $0.\overline{8}$ or 0.9

Center #6 – Make a box and whisker plot comparing the temperatures in New York and Miami.

New York – ~~70~~, ~~74~~, ~~82~~, ~~79~~, 85, ~~68~~, ~~82~~, ~~64~~, ~~76~~

64, 68, 70, 74, 76, 79, 82, 82, 85

69 76 82

Miami – ~~84~~, ~~87~~, ~~92~~, ~~80~~, ~~94~~, ~~79~~, ~~87~~, ~~74~~, ~~86~~

74, 79, 80, 84, 86, 87, 87, 92, 94

79.5 86 89.5