Name:_____ Period:_____

HW 7-1 HONORS: Central Tendency and Box & Whisker Plots

Instructions: Show all work on a **SEPARATE** piece of paper. STAPLE your work to this sheet.
Don't forget to add LABELS!

1. The following are test scores from a math class. Create a **frequency chart** and **histogram** of the test scores. Use intervals of 10.
     60, 64, 68, 68, 72, 76, 76, 80, 80, 80, 84, 84, 84, 84, 88, 88, 88, 92, 92, 96, 96, 96, 96, 96, 96, 96, 100, 100

2. U.S. Presidents have entered into office at many different ages. The table below displays the number of presidents inaugurated within different age groups. Use the data to create a **histogram.**

Age at Inauguration	40–44	45–49	50–54	55–59	60–64	65–69
U.S. Presidents	2	7	13	12	7	3

3. The frequency table below shows the ages of people attending a high school play. Make a **histogram** to display the data.

Age	Tally	Frequency
0–19	ЖⱧ ЖⱧ ЖⱧ ЖⱧ ЖⱧ ЖⱧ ЖⱧ ЖⱧ ЖⱧ II	47
20–39	ЖⱧ ЖⱧ ЖⱧ ЖⱧ ЖⱧ ЖⱧ ЖⱧ ЖⱧ III	43
40–59	ЖⱧ ЖⱧ ЖⱧ ЖⱧ ЖⱧ ЖⱧ I	31
60–79	ЖⱧ III	8

Find the **mean, median, mode, quartiles, IQR** and **range** for each data set.
4. number of students helping at the cookie booth each hour: 3, 5, 8, 1, 4, 11, 3

5. weight in pounds of boxes loaded onto a semi truck: 201, 201, 200, 199, 199

6. car speeds in miles per hour observed by a highway patrol officer: 60, 53, 53, 52, 53, 55, 55, 57

Find the **minimum, lower quartile, median, upper quartile**, and **maximum** values for each data set.

7. prices in dollars of smartphones: 311, 309, 312, 314, 399, 312

8. attendance at an event for the last nine years: 68, 99, 73, 65, 67, 62, 80, 81, 83

9. books a student checks out of the library: 17, 9, 10, 17, 18, 5, 2

Create **box and whisker plots** for the follow data sets.

10. {65, 63, 69, 71, 73, 59, 60, 70, 72, 66, 71, 58}

11. {31, 30, 28, 26, 22, 34, 26, 31, 47, 32, 18, 33, 26, 23, 18}