Stats 300 **Spring 2024**

Lab Assignment #3

This lab is due at 9:35 AM on Monday, 1/29 and is worth 6 points. This may be done individually, or in a group of 2 or 3 people.

You can make graphs by hand or on a spreadsheet or something (but then print them on paper.)

1) Go to the Stat 300 web site, click on Stats Graphs, and use the data from registered to vote to make a pie chart for the fraction of my students who are and are not registered to vote.

2) Make a pie chart for the fraction of my students who are registered in various political parties.

3) Make a frequency bar graph for the following data:
Sixty-two people were surveyed about their favorite comic strip.

Get Fuzzy	19
Pajama Diaries	11
Lio	10
Baby Blues	8
Pearls Before Swine	1
Other	13

4) Make a relative frequency bar graph for the following data:
Seventy-five people were surveyed about their favorite breed of small dog.

Chihuahua	23
Dachshund	18
Pug	12
Miniature Poodle	10
Other	12

5) The following data are the number of stolen bases for all 30 Major League Baseball teams at a point near the end of the 2018 season.

34	119	105	44	74	76	147	132	65	77
61	71	81	110	132	67	15	58	100	72
60	111	89	112	108	48	46	100	61	71

Make a histogram for stolen bases.
Use classes of equal width starting with 10-19, 20-29, 30-39, etc

6) The following are prices for one adult admission to a zoo, for a sample of zoos around the United States:

$23.00, $19.50, $19.00, $19.00, $12.00, $21.00, $20.50, $13.00
$21.50, $11.00, $20.50, $17.50, $14.75, $23.00, $20.00, $17.50
$18.00, $8.50, $17.80, $10.50, $20.50, $9.00, $24.00, $10.50

Make a histogram for these data. Use classes of equal width starting with, $8.00–$9.99, $10.00–$11.99, $12.00–$13.99, etc.

Describe the shape of this distribution.

7) A large number of paintings is sold at an auction. These data show the selling price, in dollars, for 36 paintings.

705	1080	1165	1470	970	1555	990	500	570	935
760	535	375	985	1175	1080	790	710	750	765
1330	935	745	915	1100	700	350	910	550	415
880	860	1210	1125	725	660				

Make a histogram.
Use classes of equal width starting with $200-$399, $400-$599, etc.

Describe the shape of this distribution.

8) Make a time-series graph for the following data:

Age of a child	Height (inches)
1	27.9
2	31.5
3	34.0
4	36.6
5	39.0
6	41.6
7	43.8
8	45.7
9	47.6
10	49.8
11	51.7
12	53.0
13	54.9
14	57.0