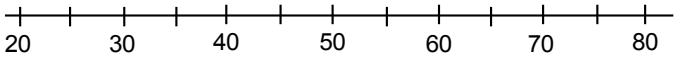
STA 2e: Sect. 2.1 Worksheet **Name** _____

DOTPLOTS, STEMPLOTS AND HISTOGRAMS

For #1 – 9: Use the following information: At one particular Virginia high school, the math department consists of 20 teachers. Their ages are as follows:

54 58 60 43 35 32 47 28 33 42 65 73 44 27 32 35 28 25 48 33

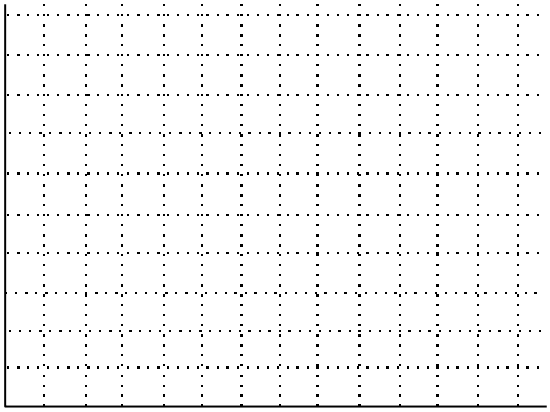
1. Construct a dotplot for the data.



2. Construct a stemplot for the data.

3. Complete the frequency table below and construct the corresponding histogram.

Class	Count
25 to < 34	
34 to < 43	
43 to < 52	
52 to < 61	
61 to < 70	
70 to < 79	



4. Describe the shape: roughly symmetric, roughly skewed left, roughly skewed right, or no discernible shape.

5. Describe the spread of the distribution. ……

6. What is the center of the distribution? (Hint: look at the original data set) ……

7. Do there appear to be any obvious outliers? If so, name them. ……

8. What is the width of each class in the histogram? ……

9. Could this data set be represented by a pie graph? Why or why not?

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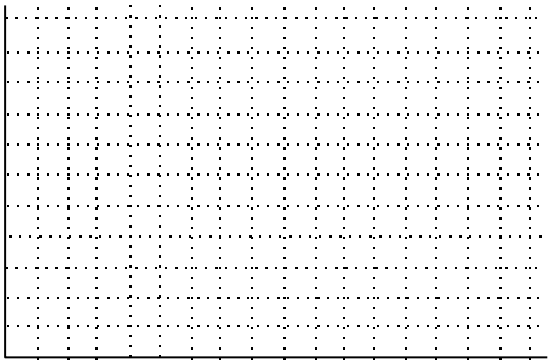
For #10 – 13: Use the following information: A teacher surveyed a group of 36 Statistic students as to the number of hours of sleep each had received the previous night. Here were the hours given:

9	6	10	8	6	7	11	7.5	6	9	7.1	7	5.9	7	8	7	7.5	7.5
4	9	8	7.2	6	4	6.5	5	8	8	7	8	7	8	5.1	5	3	6

10. Complete the following frequency distribution table.

Class	Count
3.0 to < 4.2	

11. Construct the corresponding histogram.



12. Describe the shape, spread and center of the distribution of hours slept.

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13. Are there any obvious outliers? If so, name them. ……

For #14 – 16: Use the following information: Another question in the survey of Statistics students asked students to give the number of first cousins they have. Here are the replies:

6	7	26	16	2	34	12	0	9	9	3	9	6	12	12	34	10	9
15	25	0	13	11	35	8	8	30	3	5	5	3	9	15	8	15	6

14. Construct a stemplot with "**split stems**" of the data.

15. Describe the shape, spread and center of the distribution, writing a complete sentence.

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16. Are there any obvious outliers? If so, name them.

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