Mixed Partner Practice: *Complete #1 a-c & #2d-e ON GRAPH PAPER

* **1.** The U.S. Food and Drug Administrations (USFDA) limits the amount of caffeine in a 12-ounce can of carbonated beverage to 72 milligrams. That translates to a maximum of 48 milligrams of caffeine per 8-ounch serving. Data on the caffeine content of popular soft drinks (in milligrams per 8-ounce serving) are displayed in the stemplot below.

***a.** Why did we split stems?

***b.** Give an appropriate key for this graph.

***c.** Describe the shape, center, and spread of the distribution. Are there any outliers?

1 556 2 033344 2 556677788888899 3 113 3 55567778 33 4 77

2. The duration of 40 phone calls (in minutes) for technical support is given below.

12.0	3.3	0.5	48.7	16.7	1.2	14.8	8.2	9.0	5.7
11.5	17.5	3.2	20.8	7.3	8.0	0.2	51.2	3.3	5.2
12.3	24.5	13.3	7.7	13.5	4.3	13.7	10.7	18.8	15.7
3.2	38.7	16.2	23.3	9.7	4.7	6.5	0.5	45.1	5.3

a. Complete the frequency distribution table for the call duration data.

Duration (minutes) Tally Frequency [0, 6) [0, 6] [0, 6] [6, 12) [0, 6] [0, 6] [12, 18) [0, 6] [0, 6] [12, 18) [0, 6] [0, 6] [12, 18) [0, 6] [0, 6] [12, 18) [0, 6] [0, 6] [12, 18) [0, 6] [0, 6] [13, 24) [0, 6] [0, 6] [24, 30) [0, 6] [0, 6] [30, 36) [0, 6] [0, 6] [30, 36) [0, 6] [0, 6] [30, 36) [0, 6] [0, 6] [36, 42) [0, 6] [0, 6] [42, 48) [0, 6] [0, 6] [48, 54] [0, 6] [0, 6]			
(minutes) 1 [0, 6) 1 [6, 12) 1 [12, 18) 1 [18, 24) 1 [24, 30) 1 [30, 36) 1 [36, 42) 1 [42, 48) 1	Duration	Tally	Frequency
[0, 6) [6, 12) [12, 18) [18, 24) [18, 24) [24, 30) [30, 36) [36, 42) [42, 48) [42, 48]	(minutes)	-	
[6, 12) [12, 18) [18, 24) [24, 30) [30, 36) [36, 42) [42, 48)	[0, 6]		
[12, 18] [18, 24] [24, 30] [30, 36] [36, 42] [42, 48]	(-) -)		
[12, 18] [18, 24] [24, 30] [30, 36] [36, 42] [42, 48]	[6, 12]		
[18, 24) [24, 30) [30, 36) [36, 42) [42, 48)			
[18, 24) [24, 30) [30, 36) [36, 42) [42, 48)	[12, 18]		
[24, 30) [30, 36] [36, 42] [42, 48]			
[24, 30) [30, 36] [36, 42] [42, 48]	[18, 24]		
[30, 36] [36, 42] [42, 48]			
[30, 36] [36, 42] [42, 48]	[24, 30)		
[36, 42) [42, 48]			
[36, 42] [42, 48]	[30, 36)		
[42, 48]			
[42, 48]	[36, 42)		
	[42, 48)		
[48, 54]			
	[48, 54)		

b. How many phone calls lasted less than 12 minutes?

c. How many phone calls lasted a half hour or more?

*d. Construct histogram on graph paper.

***e.** Describe the distribution.

3. You are trying to buy a new vehicle: name <u>three categorical</u> variables and <u>three quantitative</u> variables that you could measure each car by. **Give units for the quantitative variables**.

<u>Categorical</u>	Quantitative

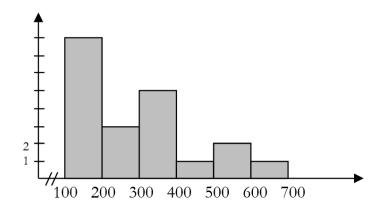
4. What are all the key pieces of information that should be given when describing a distribution?

5. What key features must always be included when **drawing** a histogram? Stemplot?

<u>Histogram</u>

Stemplot

6. Find the **center** of the given histogram.



Center: ____