

LESSON 8 - PRACTICE PROBLEMS

1. Determine the mean, median, mode, and range of the following data sets. Show all of your work. Round to two decimal places as needed.

	Data	Mean	Median	Mode	Range
a.	4, 15, 3, 8, 3, 6, 15, 5, 17				
b.	4, 3, 4, 5, 2, 4, 25				
c.	5, 9, 7, 2, 3, 32, 8, 6				
d.	5, 2, 1, 12, 10, 8, 9, 7				
e.	1, 3, 1, 4, 1, 5, 8, 6, 7, 9				

2. Answer True or False for each of the following. If your answer is False, provide an example that proves your point. If your answer is true, explain.

Given a typical set of numerical data with an odd number of values:

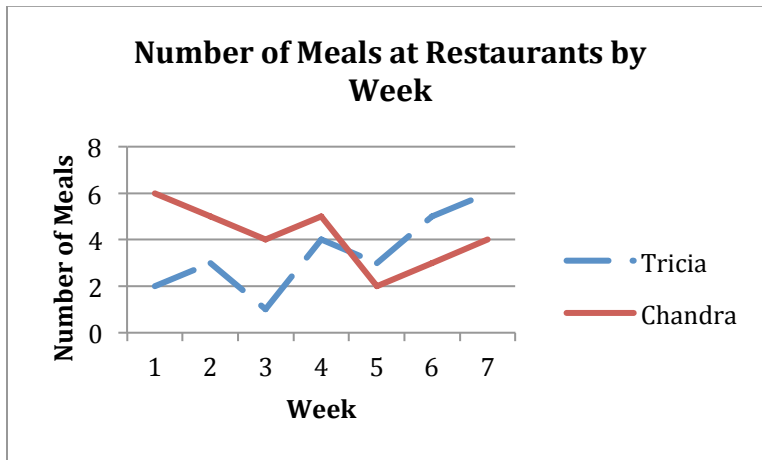
- T or F: The mean is always one of the data values.
- T or F: The median is always one of the data values.
- T or F: The mode is always one of the data values.
- T or F: The range measures the variability of the given data set.
- T or F: The mean is always the best measure of central tendency to use.

3. Compute the following weighted average. You may need to add information to the given table to help you make the correct computations.

Over a given time period, a convenience store had visits from delivery trucks in the following categories with the indicated charge per delivery. What is the average delivery charge the store pays each week?

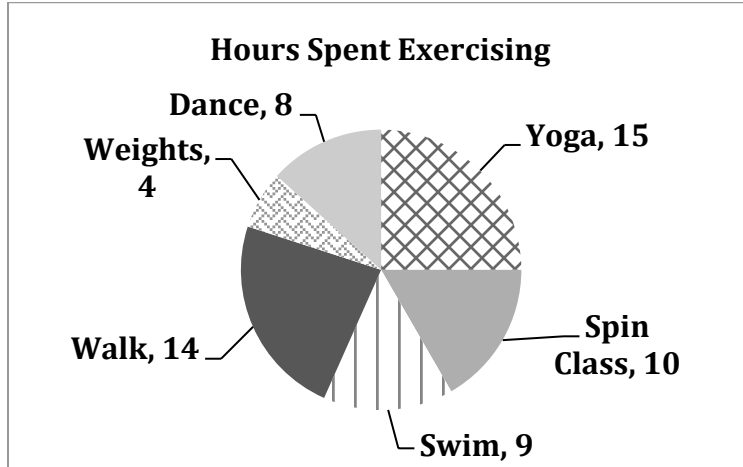
Category	Deliveries per week	Per Delivery Charge
Snacks	3	\$25.00
Alcohol	2	\$100.00
Dairy	4	\$75.00

4. Tricia and Chandra love to go to restaurants, but want to save money by eating at home. The double line graph below shows how many meals they ate at restaurants per week for a 7-week time period.



- How many meals did Tricia eat at restaurants during this 7-week time period?
- What was Tricia’s rate of meals at restaurants per week for the given seven-weeks (i.e. compute a unit rate from the given data). Round to two decimals as needed.
- How many meals did Chandra eat at restaurants during this 7-week time period?
- What was Chandra’s rate of meals at restaurants per week for the given seven-weeks (i.e. compute a unit rate from the given data). Round to two decimals as needed.
- During which week(s) did Tricia eat more meals at restaurants than Chandra?

5. The graph below displays the number of hours per month that Amber spends in varying exercise activities. Complete each item in the table below including the information in the Total row. DO NOT reduce your fraction answers to lowest terms other than in the Total Fraction of Budget cell. When you are finished, answer the questions below the table.



Category	Amount	Fraction of Exercise	Percent of Exercise
Dance			
Weights			
Walk			
Spin Class			
Swim			
Yoga			
Total			

- Given the number of hours spent in one month doing Yoga, how many hours would Amber spend on yoga in 12 months?
- What do you notice about the totals in the Fraction of Budget column and the Percent of Budget column?
- Reduce all your items in the Fraction of Budget column and then add them together. Do you get the same final, simplified result that you did in the table?