

Basic College Mathematics – Final Exam

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. The following data shows the surface areas of 12 exercise rooms. Create a bar graph with four classes along with computing the mean, median and mode for the data.

800	1435	768	1500	875	1152
1200	1800	1500	1150	975	816

Class	Tally	Total

Graph

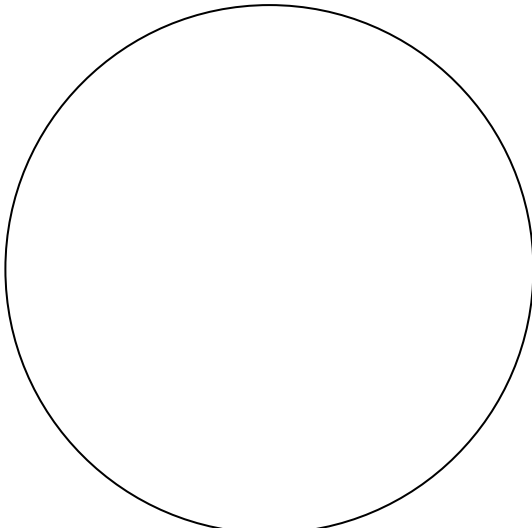
Mean: \_\_\_\_\_  
Median: \_\_\_\_\_  
Mode: \_\_\_\_\_

Calculations

2. There are four different groups of furniture in the lobbies. Compute the percentages and draw the pie chart showing their group.

Couch	Chair	Lamp	Table	Chair	Chair	Lamp
Table	Lamp	Table	Lamp	Couch	Table	Table
Chair	Couch	Chair	Couch	Table	Couch	Lamp

Color	Tally	Total	Percentage



3. The maintenance woman wants to set the heater temperature in the Mexican resort at 41.5°C. The heater only takes Fahrenheit settings. What Fahrenheit setting should maintenance woman set on the heater?

4. Martha, the trainer mixes a solution of organic food and supplement. The supplement directions say to mix three parts supplement to eight parts food. If there is 6 oz of food, how many ounces of supplement should be added?

5. The technician added three components to the food. There was  $\frac{1}{2}$  tablespoon of the supplement; there was  $\frac{3}{4}$  tablespoon of vitamins and  $\frac{1}{2}$  cup of food. What is the total amount of nourishment in tablespoons (16 T = 1 c). If the directions state that we need to give the food  $\frac{1}{2}$ -part liquid to 2 parts nourishment, how much liquid in teaspoons do you add?

6. The Stanford Clinic has the only scientific lab in the county, so they have contracted with the federal government to test the resort lakes for impurities. Marie the technician found 14,500,000 impurities in a gallon of water last month. There is 9.5 million gallons in the resort lake. Her report this month shows  $9.23 \times 10^{13}$  impurities this month. How many impurities were in her gallon of water this month?