Two-Way Frequency and Relative Frequency Tables
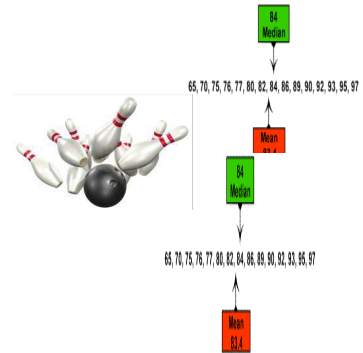
1) You survey friends about the type of party they enjoy most.

Gender

	Male	Female	Total
Bowling	6	2	8
Skating	3	11	14
Dancing	1	3	4
Total	10	16	26

Party Type

65, 70, 75, 76, 77, 80, 82, 84, 86, 89, 90, 92, 93, 95, 97

65, 70, 75, 76, 77, 80, 82, 84, 86, 89, 90, 92, 93, 95, 97

Two-Way Table: _____

Frequency:_____

Relative Frequency Table:_____

 What type of party would you plan for them? Explain.

Write a valid conclusion from the graph.

_____

_____

_____

2) Eighth grade students were asked whether they participate in an after-school activity.
   Complete the two-way frequency table below.

After-school Activity

		Yes	No	Total
Gender	Male		40	
	Female			95
	Total	102		187

3) Sequoya students were polled about whether or not they owned an I-POD. The results of the
   Relative Percentage are shown below in percentage form. Complete the chart below.

I-POD

Grade		Yes	No	Total
	7th	42%		75%
	8th			
	Total	55%		100%

a. Did more students have I-Pods or not?

4) The chart below represents the **Relative Frequency** of people who own an I-Pod.
Complete the two-way frequency table.

I-POD

	Yes	No	Total
Students	.51		.70
Adults	.27		
Total			1.00

Creating a **Relative Frequency** table based on TOTAL people.

5) Below is a table of people in the park and the activities that they do. Complete the frequency table below, based on the total participants.

To create a relative-frequency two-way table for **all 50 people**, divide each number in each cell by 50

Activity	Jog	Fly Kites	Picnic	Total
Male	9	4	10	
Female	11	1		
Total			25	50

Create a **Relative Frequency** table based on the total number of participants

Topping	Jog	Fly Kites	Picnic	Total
Male				
Female				
Total				

6) You go to a dance and help clean up afterwards. To help, you collect the soda cans, Coca-Cola and Sprite, and organize them. Some cans were on the table and some were in the garbage. Seventy-two total cans were found. 42 total cans were found in the garbage and fifty total cans were Coca-Cola. 14 Sprite cans were found on the table. Complete the two-way frequency chart.

	Coca-Cola	Sprite	Total
Table			
Garbage			
Total			

	Coca-Cola	Sprite	Total
Table			
Garbage			
Total			

Complete a relative frequency table based on the TOTAL number of cans.

Two-Way Frequency and Relative Frequency Tables - Homework

1. Eighth grade students were asked whether they participate in an after-school activity. Complete the two-way frequency table below.

After-school Activity

		Yes	No	Total
	Male		40	
Gender	Female			95
	Total	102		187

2. The table shows the results of a survey about what the engineers said their favorite subject was in middle school.

	Math	Science	Total
Electrical	85	90	175
Chemical	80	91	171
Mechanical	89	81	170
Total	254	262	516

a) How many chemical engineers chose science? _____

b) How many engineers chose math? _____

c) Overall, what was the favorite subject of all engineers? _____

3) Jeremy asked a sample of 40 8th grade students whether or not they had a curfew. He then asked if they had a set bedtime for school nights. He recorded his data in this two-way frequency table.
    Create a two-way relative frequency table for these data.

	Bedtime	No Bedtime	Total
Curfew	21	4	25
No Curfew	3	12	15
Total	24	16	40

	Bedtime	No Bedtime	Total
Curfew			
No Curfew			

4) The table shows the grade levels and primary home languages for all the students at Martin Middle School.

	6th Grade	7th Grade	8th Grade	Total
English	104	99	116	319
Other	56	81	84	221
Total	160	180	200	540

Use the grid below to create a two-way relative frequency table.

	6th Grade	7th Grade	8th Grade
English			
Other			
Total			

5) A recent poll asked whether customers like a restaurant's new lunch menu. Complete the corresponding relative frequency table with respect to the total population.

Frequency Table
New Menu

	Yes	No	Total
Male	13	15	28
Female	18	25	43
Total	31	40	71

Total Relative Frequency Table
New Menu

	Yes	No	Total
Male			
Female			
Total			

6. Solve: $\frac{2}{3}x + \frac{1}{2} = \frac{5}{6}$

7. Express 0.000089 in scientific notation

8. What is the equation $2x + y = 9$ written in slope-intercept form?

9. Simplify $(4x^3)^2 (3x^5)$