Strategy for Creating and Completing 2 Way Tables

1. Identify the categories (variables)
2. Construct a 2 Way Table based on those categories, one variable identified in columns, the other in rows. Include a Total at the far right column and at the bottom of the first row
3. Fill in the provided information
4. Fill in the other information by adding or subtracting
- **To convert to frequencies, place the value of each box over the Total in the bottom right corner.**

Example

In a survey of 240 people, 21 of the males liked SUV's and 39 liked sports cars. Of the 180 females in the survey, 45 liked sports cars.

1. The categories are male/female and SUV/Sports car
2. Two way table

	SUV	Sports Car	Total
Female			
Male			
Total			

3. Fill in information

	SUV	Sports Car	Total
Female		45	180
Male	21	39	
Total			240

4.

	SUV	Sports Car	Total
Female	135	45	180
Male	21	39	60
Total	156	84	240

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	SUV	Sports Car	Total
Female	135/240 = .56	45/240 = .19	180/240 = .75
Male	21/240 = .09	39/240 = .16	60/240 = .25
Total	156/240 = .65	84/240 = .35	240/240 = 1

2 Way Tables/Charts

1. A survey of high school students identified the course students like best. Use the following 2 Way Table to determine the total number of students surveyed and the number of females who liked chemistry.

	Male	Female	Total
Biology	6	2	8
Chemistry	3		14
Physics	1	3	4
Total	10	16	

2. Junior high students were asked whether they wanted to receive after school tutoring in math. Complete the following 2 Way Table.

	Yes	No	Total
Boys		40	
Girls			95
Total	102		187

How many boys said yes on the survey?

3. Use the following information on the 2 Way Table to complete the table.

	Jog	Fly Kites	Picnic	Total
Men	9	4	10	
Women	11	1		
Total			25	50

How many women liked to picnic?

Below you will find an incomplete two ways table that shows the number of girls and boys that were passing Economics and Science. There are a total of 72 boys and 72 girls taking Economics. There are 78 boys and 60 girls taking Science.

Gender	Passing Economics	Failing Economics	Passing Science	Failing Science	Total
Boys	61		69		
Girls	67		53		
Total					

1. Complete the 2 Way Table using all the information above.
2. How many of the boys and girls failed Economics?
3. How many of the girls failed science?
4. How many students were in the survey?

60 students in junior high were asked if they prefer math, science or English. Their responses were tabulated below.

	Math	Science	English	Total
Grade 7	12	8		
Grade 8			10	35
Total				60

5. Complete the 2 way Table.
6. How many 7th grade students were in the survey?
7. How many students preferred math?
8. How many 8th grade students preferred science?

Sweatshirts come in three sized; small, medium and large from the factory. The sweatshirts are made of three fabrics; cotton, polyester and silk and shipped last week.

	Small	Medium	Large	Total
Cotton	7			23
Polyester		16		34
Silk	3	8	2	13
Total	20		14	

9. Complete the 2 Way Table
10. How many sweatshirts were shipped out last week?
11. How many medium sweatshirts were shipped?
12. How many small polyester sweatshirts were shipped?

13. In a survey of 40 people, 25 liked to play golf, 30 liked to play tennis, and 4 liked to play golf but not tennis. Construct and complete a 2 way table to answer how many people surveyed didn't like to play either golf or tennis and how many liked to only play tennis.

	Golf	Not Golf	Total
Tennis			
Not Tennis			
Total			

14. With 50 students in Chess Club, 30 students like math, 8 liked both math and chemistry and 10 liked only chemistry. Construct and complete a 2 way Table and determine how many of the students in the Chess Club didn't like either math or chemistry?

	Math	~ Math	Total
Chem			
~ Chem			
Total			

15. Random people were asked about their TV preferences. 50 people said they liked to watch Westerns, 40 said they liked watching Soaps, 10 indicated they enjoyed watching both Westerns and Soaps and 8 indicated they didn't like watching either Westerns or Soaps. Construct and complete a 2 Way Table to determine the total number of people surveyed.

	Western	~ Westerns	Total
Soaps			
~ Soaps			
Total			

16. In Juan's class, 20 students liked hot dogs, 25 liked hamburgers, 15 liked both hot dogs and hamburgers and 2 didn't like either hot dogs or hamburgers. Construct and complete a 2 Way Table to determine how many students were in the class.

	Hot dog	~ Hot dog	Total
Hamburger			
~ Hamburger			
Total			

17. Make and complete a 2 Way Table using the following information. There are Chevrolets and Fords. Some cars are parked in the garage and some were parked outside. There were 72 cars, 42 cars were Fords parked in the in the garage and 50 total cars were Fords. 14 Chevrolets parked outside.

	Ford	Chevrolet	Total
Garage			
Outside			
Total			

18. A survey of 80 students found 47 students had a dog. Of those students 17 also had a cat. There were 24 students that had a cat, but no dog. There were 9 students that did not have a cat or a dog. Complete the following 2 Way table using that information.

	Cat	No Cat	Total
Dog			
No Dog			
Total			

19. Construct a 2 Way table and fill in the relevant data.
In a group of 100 people, there are 60 males and 40 females. 15 males have brown eyes and the remaining are blue eyed. 20 females have brown eyes and the rest are blue eyed.

			Total
Total			

20. There are 19 boys who belong to the Breakfast Club. 12 like ham, 8 like sausage and 5 like both ham and sausage. How many in the club like ham only? Only like sausage?

	Ham	No Ham	Total
Sausage			
No Sausage			
Total			

21. A survey of 70 high school students revealed that 35 like folk music, 15 like classical music, and 5 like both. How many of the students surveyed do not like either folk or classical music?

			Total
Total			