Math II Building Two Way Frequency Tables

Creating a frequency table from data already given in table, then answering questions about it

Wolverine's Table

Fill in the blanks in Wolverine's two-way table of the people he knows:

	Mutant	Human	Alien	Total
Good		43		72
Bad	84		35	
Total	111	52		200

Use the table to answer the questions.

1. What is the probability of picking a mutant at random from the people Wolverine knows?
2. What's the probability of picking a good human?
3. What is the probability of picking someone who is bad?

Challenge:

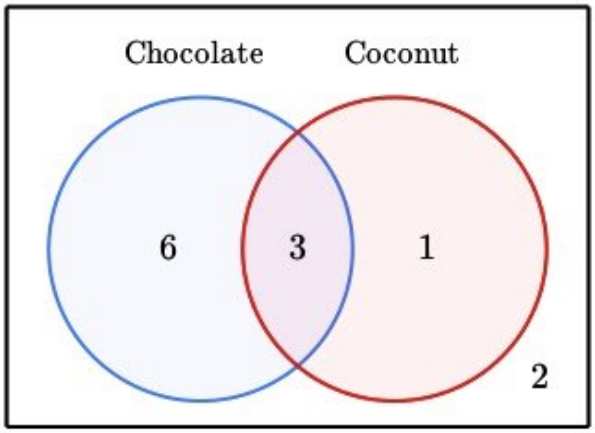
4. Which category of individual has a 1% chance of being selected?

Creating a frequency table from a Venn Diagram

Forest has a box of 12 candies. The Venn diagram below shows how many candies contain chocolate, coconut, both, or neither.

Complete the following two-way frequency table.

	Contain coconut	Do not contain coconut
Contain chocolate		
Do not contain chocolate		



Creating a frequency table from some observations

Nikita knows the following information about her food club that has 11 members:

- 3 members like neither fruit nor vegetables.
- 4 members like fruit but not vegetables.
- 5 members in total like fruit.

Can you help Nikita organize the results into a two-way frequency table?

	Like fruit	Do not like fruit
Like vegetables		
Do not like vegetables		

Creating a Relative Frequency Table (for the whole table) from a Two Way Frequency Table

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

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. First, complete the table.

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

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

Topping	Jog	Fly Kites	Picnic	Total
Male				
Female				
Total				

Math II Building Two Way Frequency Tables

Fifty students in the 8th grade class were asked what kind of ice-cream they like (vanilla or chocolate) and what kind of toppings they like (sprinkles, m & m's, or nothing). Identify any trends in the data.

Topping	Sprinkles	m & m's	Nothing	Total
Vanilla	9	8	13	30
Chocolate	7	9	4	20
Total	16	17	17	50

_____

_____

_____

To create a relative-frequency two way table with **percents**, use the total number of students.

Topping	Sprinkles	m & m's	Nothing	Total
Vanilla				
Chocolate				
Total				

This will answer the following questions. (State the Percents.)

P(Vanilla and Sprinkles) = _____

P(Chocolate and Sprinkles) = _____

P(Vanilla and m & m's) = _____

P(Chocolate and m & m's) = _____

P(Vanilla and Nothing) = _____

P(Chocolate and Nothing)= _____

To create a relative-frequency two way table for the **rows**, divide each number in each row by the total in that row.

Topping	Sprinkles	m & m's	Nothing	Total
Vanilla				
Chocolate				

This will answer the following questions. (State the Percents.)

P(Sprinkles given Vanilla) = _____

P(Sprinkles given Chocolate) = _____

P(m & m's given Vanilla) = _____

P(m & m's given Chocolate) = _____

P(Nothing Given Vanilla) = _____

P(Nothing given Chocolate)= _____

To create a relative-frequency two way table for the **columns**, divide each number in each column by the total in that column.

Topping	Sprinkles	m & m's	Nothing
Vanilla			
Chocolate			
Total			

This will answer the following questions. (State the Percents.)

P(Vanilla given Sprinkles) = _____

P(Chocolate given Sprinkles) = _____

P(Vanilla given m & m's) = _____

P(Chocolate given m & m's) = _____

P(Vanilla given Nothing) = _____

P(Chocolate given Nothing)= _____