1. The students in a seaside school are to have extra swimming lessons if they cannot swim. The table below gives information about the students in grades 7, 8 and 9.

	Can swim	Cannot swim	Total
Grade 7	120	60	
Grade 8	168	11	
Grade 9	172	3	
Total			

	Can swim	Cannot swim	Total
Grade 7			
Grade 8			
Grade 9			
Total			

   a. Complete the table
   b. How many students need swimming lessons?
   c. How many students are there in 8th grade?
   d. How many of the 7th grade students cannot swim?
   e. How many students in grades 7 and 8 can swim?
   f. How many students are there altogether in grades 7, 8, and 9?
   g. Create a two-way relative frequency table for the above data.
   h. What is the relative frequency of students who are in 8th grade and cannot swim?
   i. What percentage of 9th grade students can swim?
   j. What percentage of students cannot swim?
   k. What percentage of students are 9th graders?

2. A principal of a school with 484 students collected information about how many of the students wear glasses.

	Always wears glasses	Sometimes wears glasses	Never wears glasses	Total
Boys	40		161	
Girls	36	55	144	
Total				

   a. Complete the table
   b. How many boys sometimes wear glasses?
   c. How many students wear glasses some of the time?
   d. How many students never wear glasses?
   e. Are there more boys or girls in the school?
   f. Create a two-way relative frequency table for the above data.
   g. What is the relative frequency of boys who sometimes wear glasses?
   h. What percentage of girls never wear glasses?
   i. What percentage of students are boys?
   j. What percentage of students always wear glasses?

3. Draw your own two-way table for the given information to answer the question.

In a class of 32 students, there were 8 girls who played basketball and 5 boys who did not.

    a. How many boys played basketball if there were 15 girls in the class?
    b. Create a two-way relative frequency table for the data.

    c. What is the relative frequency of girls who played did not play basketball?
    d. What percentage of boys played basketball?
    e. What percentage of students played basketball?
    f. What percentage of students are girls?

1. Felipe surveyed students at his school. He found that 78 students own a cell phone and 57 of those students own an MP3 player. There are 13 students that do not own a cell phone, but own an MP3 player. Nine students do not own either device.

a. Construct a two-way table summarizing the data.

b. Construct a two-way relative frequency table for the data.

2. There are 150 children at summer camp and 71 signed up for swimming. There were a total of 62 children that signed up for canoeing and 28 of them also signed up for swimming.

a. Construct a two-way table summarizing the data.

b. Construct a two-way relative frequency table for the data.

3. The two-way table shows the number of students that do or do not do chores at home and whether they receive an allowance or not.

	Allowance	No Allowance
Do Chores	13	3
Do Not Do Chores	5	4

a. How many total students do chores?

b. What is the relative frequency of students that do chores and get an allowance to the number of students that do chores? Round to the nearest hundredth if necessary.

c. What is the relative frequency of students that do not do chores nor get an allowance to the total number of students? Round to the nearest hundredth if necessary.

4. The two-way table below shows the number of students with each hair color and eye color. Create a relative frequency table out to the side of the table.

| | | Hair Color | | | |
Eye Color		Black	Brown	Red	Blond	Total
	Brown	7	12	3	1	23
	Blue	2	8	2	9	21
	Hazel	2	5	1	1	9
	Green	1	3	1	2	7
	Total	12	28	7	13	60

Which is greater: the percentage of the brown-haired students with blue eyes or the percentage of the red-haired students with brown eyes?

5. 80 students each study one Science. The table shows some information about these students
a. Complete the table

	Biology	Chemistry	Physics	Total
Female	18			47
Male			19	
Total		21	33	80

b. What is the probability that the student studies Physics?

c. What is the probability that the student is male and does not study biology?

d. What is the probability that the student is female and studies Chemistry?

e. What is the probability that the student is not female?

f. What is the probability that the student does not study Biology?