

A _____ - _____ displays two categories of data collected from the same source.

Each entry in a two-way table is called _____.

The sums of the rows and columns in a two-way table are called _____.

		Student	
		Studied	Did Not Study
Grade	Passed	21	2
	Failed	1	6

joint frequency

Reading a Two-Way Table

Ex:) How many students in the survey above studied for the test and passed?

Notes:

OYO:) How many students in the survey above studied for the test and failed?

Finding Marginal Frequencies

Ex:) Find and interpret the marginal frequencies for the survey.

Notes:

		Student	
		Studied	Did Not Study
Grade	Passed	21	2
	Failed	1	6

OYO:) You randomly survey students in a cafeteria about their plans for a football game and a school dance. The two-way table shows the results. Find and interpret the marginal frequencies for the survey.

Notes:

		Football Game	
		Attend	Not Attend
Dance	Attend	35	5
	Not Attend	16	20

Making a Two-Way Table

Ex:) You randomly survey students between the ages of 12 and 17 about whether they ride the bus to school. The results are shown in the tally sheets. Make a two-way table that includes the marginal frequencies.

Notes:

Rides Bus	
Age	Tally
12-13	
14-15	
16-17	

Does Not Ride Bus	
Age	Tally
12-13	
14-15	
16-17	

OYO:) You randomly survey students about whether they buy a school lunch or pack a lunch. The results are shown. Make a two-way table that includes the marginal frequencies.

Notes:

	Grade 6 Students	Grade 7 Students	Grade 8 Students
pack lunch,	11	23	16
buy school lunch	9	27	14

Modeling Real Life

Ex:) For each age group in Example 3, what percent of the students ride the bus? Do not ride the bus? Determine whether there is a relationship between age and riding the bus to school.

Notes:

		Age		
		12-13	14-15	16-17
Student	Rides Bus			
	Does Not Ride Bus			

OYO:) The results of a voting survey are shown in the two-way table.
For each age group, what percent of voters prefer Candidate A? Candidate B?
Determine whether there is a relationship between age and candidate preference.

Notes:

		Voter's Age		
		18-34	35-64	65+
Candidate	A	36	25	6
	B	12	32	24