

Lesson 03: What story does the data tell?



Class	Count
First	325
Second	285
Third	706
Crew	885

Was there a relationship between the kind of ticket a passenger held and the passenger's chances of making it into a lifeboat?

Displaying Categorical data continued:

5. Contingency Tables or Two-way Tables:

- allow us to look at two categorical variables together
- useful to show how the distribution of one variable for just those cases that satisfy a condition on another variable

		Class				Total
		First	Second	Third	Crew	
Survival	Alive	203	118	178	212	711
	Dead	122	167	528	673	1490
	Total	325	285	706	885	2201

Cell, marginal distribution

Don't neglect how many cases are in each category. Look carefully at marginal distribution.

The following is the conditional distribution of ticket *Class*, conditional on having survived:

		Class				
		First	Second	Third	Crew	Total
Alive	Count	203	118	178	212	711
	Percentage	28.6%	16.6%	25.0%	29.8%	100%

So many ways to look at the data...

		Class					
		First	Second	Third	Crew	Total	
Survival	Alive	Count	203	118	178	212	711
		% of Row	28.6%	16.6%	25.0%	29.8%	100%
		% of Column	62.5%	41.4%	25.2%	24.0%	32.3%
Survival	Dead	Count	122	167	528	673	1490
		% of Row	8.2%	11.2%	35.4%	45.2%	100%
		% of Column	37.5%	58.6%	74.8%	76.0%	67.7%
Survival	Total	Count	325	285	706	885	2201
		% of Row	14.8%	12.9%	32.1%	40.2%	100%
		% of Column	100%	100%	100%	100%	100%
		% of Table	14.8%	12.9%	32.1%	40.2%	100%
