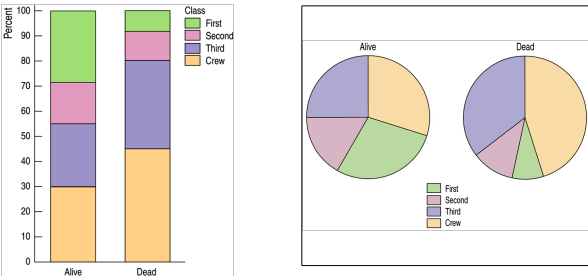Lesson 04: Is it a bar or a pie?

or

Q: What's wrong?

Do not make a report like "We found that 66.67% of the rats improved their performance with training. The other rat died."

It is a Segmented Bar Chart

A segmented bar chart displays the same information as a pie chart, but in the form of bars instead of circles.

Table for Comparison

		Class				
		First	Second	Third	Crew	Total
Survival	Alive	203 28.6%	118 16.6%	178 25.0%	212 29.8%	711 100%
	Dead	122 8.2%	167 11.2%	528 35.4%	673 45.2%	1490 100%

A company held a blood pressure screening clinic for its employees. The results are summarized in the table below by age group and blood pressure level:

	Age		
	Under 30	30–49	Over 50
Low	27	37	31
Normal	48	91	93
High	23	51	73

Blood Pressure (row label)

a) Find the marginal distribution of blood pressure level.
b) Find the conditional distribution of blood pressure level within each age group.
c) Compare these distributions with a segmented bar graph.
d) Write a brief description of the association between age and blood pressure among these employees.
e) Does this prove that people's blood pressure increases as they age? Explain.

Review of displaying and describing categorical data