

Statistics
Chapters 1 & 2 Quiz Review

200 adults shopping at a supermarket were asked about the highest level of education they had completed and whether or not they smoke cigarettes. Results are summarized in the table.

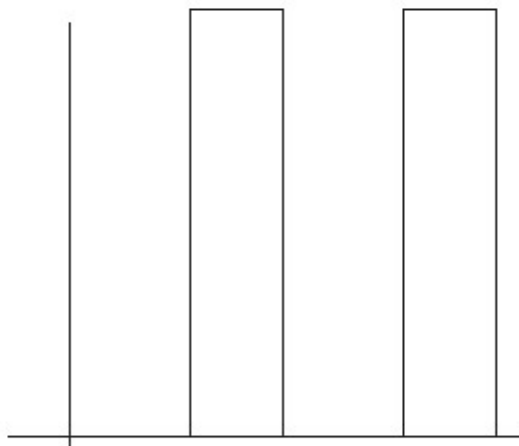
1. Discuss the W's.

	Smoker	Non-smoker	Total
High school	32	61	93
2 yr college	5	17	22
4+ yr college	13	72	85
Total	50	150	200

2. Identify the variables.

3. a) What percent of the shoppers were smokers with only high school educations?
b) What percent of the shoppers with only high school educations were smokers?
c) What percent of the smokers had only high school educations?
d) What is the conditional distribution of smokers given that they obtained 4+ years of college?
e) What is the marginal distribution of non-smokers?

4. Create a segmented bar graph comparing education level among smokers and non-smokers. Label your graph clearly.



5. Do these data suggest there is an association between smoking and education level? Give statistical evidence to support your conclusion.

Public Relations staff at State University phoned 850 local residents. After identifying themselves, the callers asked the survey participants their ages, whether they had attended college, and whether they had a favorable opinion of the university. The official report to the university's directors claimed that, in general, people had very favorable opinions about their university.

6. Who:

What:

When:

Where:

Why:

How:

7. List the variables in the data set. Indicate whether each variable is treated as categorical or quantitative in this data set. If the variable is quantitative, state the units.