

Name \_\_\_\_\_ Date \_\_\_\_\_

**She Blinded Me with Science!**  
**Relative Frequency Conditional Distribution**

1. Angie is taking a broadcast communications class at her local college. The professor presents the students with the results of a survey that was conducted to determine where different age groups of people get their news. The table shows the results of the survey.

		News Source					Total
		Local TV	National TV	Radio	Newspaper	Internet	
Age Group	Under 35	95	72	74	53	110	
	35–49	110	107	100	78	84	
	50+	136	129	111	106	71	
	Total						

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- a. Complete the frequency marginal distributions.
- b. Angie claims that overall more people get their news from local TV than any other source. Is she correct? Explain your reasoning.
- c. Angie’s classmate claims that the under 35 age group must use local TV less than the 35 to 49 age group because 95 is less than 110. Is she correct? Explain your reasoning.

- d. Construct a relative frequency conditional distribution of news source given the age group.

News Source

		Local TV	National TV	Radio	Local Newspaper	Internet	Total
Age Group	Under 35						
	35–49						
	50+						

- e. Which age group has the fewest number of people who receive their news from local TV? How does this compare to the claim made in part (c)?

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2. A broadcast journalism class is given the results of a survey that was done to see if there is a difference between men and women and how they get their news. The results are shown in the table.

News Source

		Local TV	National TV	Radio	Local Newspaper	Internet	Total
Gender	Male	51	44	50	43	48	
	Female	41	48	27	37	53	
	Total						

- a. Complete the frequency marginal distribution.

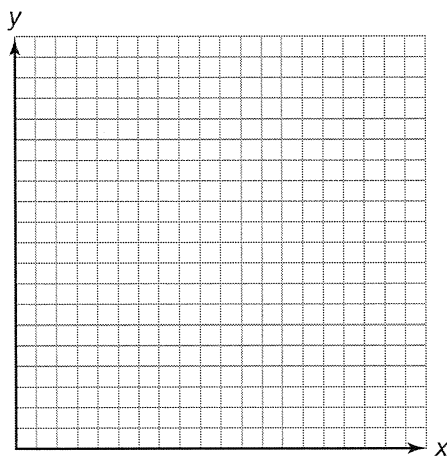
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- b. Construct a relative frequency conditional distribution of gender given the news source.

		News Source				
		Local TV	National TV	Radio	Local Newspaper	Internet
Gender	Male					
	Female					
	Total					

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- c. Construct a stacked bar graph of the relative frequency conditional distribution.



- d. A company that produces men's shaving cream has created a new advertisement. They want to make sure the ad reaches as many men as possible. What source of news would you suggest they use? Explain your reasoning.