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AP Statistics – Ms. Klimczuk

Chapter 2 Homework – Displaying and Describing Categorical Data

1. Young people are more likely than older folk to buy music online. Here are the percents of people in several age groups that bought music online in a recent year.



1. Explain why it would not be correct to use a pie chart for this data.
2. Make a bar graph for your data. Make sure to label your axis.
3. Students in a high school statistics class were given data about the main method of transportation to a school for a group of 30 students. They produced the following display:



1. How is this graph misleading?
2. Make a new graph that isn’t misleading. Make sure to label your axis.
3. Yellowstone National Park surveyed a random sample of 1526 winter visitors to the park. They asked each person whether they owned, rented, or had never used a snowmobile. Respondents were also asked whether they belonged to an environmental organization. The contingency table summarizes the survey responses.



1. Do these data suggest that there is an association between environmental club membership and the snowmobile use among visitors to Yellowstone National Park?
2. Give appropriate evidence to support your claim. (Hint: Well chosen graphs to display data can help).
3. The National Survey of Adolescent Health interviewed several thousand teens (Grades 7 to 12). One question asked was, “What do you think are the chances you will be married in the next 10 years?” Here is a contingency table of the responses by gender.



1. What was the percent of females among the respondents?
2. What percent of males thought they were “Almost certain” to be married in the next ten years?
3. What percent of the people who responded “Almost no chance” were male?
4. What percent of all respondents thought it was “A good chance” they would get married in the next ten years?