U.S. Department of Health and Human Services. Does the source of the data appear to be unbiased?

24. Conclusion If we were to use such data and conclude that there is a correlation or association between IQ score and brain volume, does it follow that larger brains are the cause of higher IQ scores?

What's Wrong?   *In Exercises 25–28, identify what is wrong.*

25. Potatoes In a poll sponsored by the Idaho Potato Commission, 1000 adults were asked to select their favorite vegetables, and the favorite choice was potatoes, which were selected by 26% of the respondents.

26. College Major In a *USA Today* online poll, 728 Internet users chose to respond, and 41% of them said that their college majors prepared them for their chosen careers very well.

27. Cell Phones and Pirates In recent years, the numbers of cell phones and the numbers of pirates have both increased, so there is a correlation, or association, between those two variables. Therefore, cell phones cause pirates.

28. Storks and Babies In the years following the end of World War II, it was found that there was a strong correlation, or association, between the number of human births and the stork population. It therefore follows that storks cause babies.

Percentages.   *In Exercises 29–36, answer the given questions, which are related to percentages.*

29. Evolution A Gallup poll of 1018 adults reported that 39% believe in evolution.

a. What is the exact value that is 39% of 1018?

b. Could the result from part (a) be the actual number of adults who said that they believe in evolution? Why or why not?

c. What is the actual number of adults who said that they believe in evolution?

d. Among the 1018 respondents, 255 said that they did not believe in evolution. What percentage of respondents said that they did not believe in evolution?

30. Online Shopping In a *Consumer Reports* Research Center Telephone survey of 427 women, 38% said that they purchased clothing online.

a. What is the exact value that is 38% of 427?

b. Could the result from part (a) be the actual number of women who said that they purchase clothing online? Why or why not?

c. What is the actual number of women who said that they purchase clothing online?

d. Among the 427 respondents, 30 said that they purchase electronics online. What percentage of the women said that they purchase electronics online?

31. Piercings and Tattoos In a Harris poll of 2302 adults, 14% said that they have a tattoo.

a. What is the exact value that is 14% of 2302?

b. Could the result from part (a) be actual number of adults who said that they have a tattoo? Why or why not?

c. What is the actual number of adults who said that they have a tattoo?

d. Among the 2302 respondents, 46 said that they had face piercings only. What percentage of respondents had face piercings only?