20. Analysis of Last Digits Weights of respondents were recorded as part of the California Health Interview Survey. The last digits of weights from 50 randomly selected respondents are listed below. Construct a frequency distribution with 10 classes. Based on the distribution, do the heights appear to be reported or actually measured? What do you know about the accuracy of the results?

5 0 1 0 2 0 5 0 5 0 3 8 5 0 5 0 5 6 0 0 0 0 0 0 8
5 5 0 4 5 0 0 4 0 0 0 0 0 8 0 9 5 3 0 5 0 0 0 5 8

21. Pulse Rates of Males Refer to Data Set 1 in Appendix B and use the pulse rates (beats per minute) of males. Begin with a lower class limit of 40 and use a class width of 10. Do the pulse rates of males appear to have a normal distribution?

22. Pulse Rates of Females Refer to Data Set 1 in Appendix B and use the pulse rates (beats per minute) of females. Begin with a lower class limit of 50 and use a class width of 10. Compare the frequency distribution to the one found in the preceding exercise. Is there a notable difference between pulse rates of males and females?

23. Earthquake Magnitudes Refer to the earthquake magnitudes listed in Data Set 16 of Appendix B. Begin with a lower class limit of 0.00 and use a class width of 0.50. Using a very strict interpretation of the requirements for a normal distribution, do the magnitudes appear to be normally distributed?

24. Earthquake Depths Refer to the earthquake depths listed in Data Set 16 in Appendix B. Begin with a lower class limit of 1.00 km and use a class width of 4.00 km. Using a very strict interpretation of the requirements for a normal distribution, do the depths appear to be normally distributed?

25. Male Red Blood Cell Counts Refer to Data Set 1 in Appendix B and use the red blood cell counts (million cells/μL) for males. Begin with a lower class limit of 4.00 and use a class width of 0.40. Using a very loose interpretation of the requirements for a normal distribution, do the red blood cell counts appear to be normally distributed?

26. Female Red Blood Cell Counts Refer to Data Set 1 in Appendix B and use the red blood cell counts (million cells/μL) for females. Begin with a lower class limit of 3.60 and use a class width of 0.40. Using a very loose interpretation of the requirements for a normal distribution, do the red blood cell counts appear to be normally distributed?

27. Flight Arrival Times Refer to Data Set 15 in Appendix B and use the times of the arrival delays. Begin with a lower class limit of –60 min and use a class width of 30 min. Based on the result, does it appear that most of the American Airline flights from JFK to LAX are close to arriving in Los Angeles without too much delay?

28. Flight Taxi-Out Times Refer to Data Set 15 in Appendix B and use the times required to taxi out for takeoff. Begin with a lower class limit of 10 min and use a class width of 5 min. Based on the result, does it appear that the time required to taxi out can be predicted with reasonable accuracy?

Categorical Data. ***In Exercises 29–32, use the given categorical data to construct the relative frequency distribution.***

29. Titanic Survivors The 2223 people aboard the *Titanic* include 361 male survivors, 1395 males who died, 345 female survivors, and 122 females who died.

30. Train Derailments An analysis of 50 train derailment incidents identified the main causes listed below, where T denotes bad track, E denotes faulty equipment, H denotes