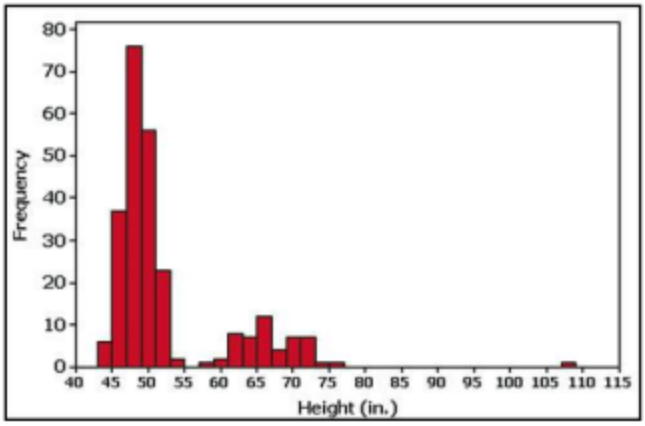
Interpreting a Histogram. ***In Exercises 5–8, answer the questions by referring to the following Minitab-generated histogram, which represents the heights (inches) of people randomly selected from those who entered New York City's Museum of Natural History during a recent Friday morning.***

MINITAB



5. Sample Size What is the approximate number of people with heights of 55 in. or less?

6. Class Width and Class Limits What is the class width? What are the approximate lower and upper class limits of the first class?

7. Outlier? What is the height of the tallest person included in the histogram? Where on the histogram is that height depicted? Is that height an outlier? Could that height be an exceptional value that is correct, or is it an error? Explain.

8. Gap What is a reasonable explanation for the gap between the group of people with heights between 43 in. and 55 in., and the group of people with heights between 57 in. and 77 in.?

Constructing Histograms. ***In Exercises 9–18, construct the histograms and answer the given questions.***

9. Analysis of Last Digits Use the frequency distribution from Exercise 19 in Section 2-2 to construct a histogram. What can you conclude from the distribution of the digits? Specifically, do the heights appear to be reported or actually measured?

10. Analysis of Last Digits Use the frequency distribution from Exercise 20 in Section 2-2 to construct a histogram. What can you conclude from the distribution of the digits? Specifically, do the weights appear to be reported or actually measured?

11. Pulse Rates of Males Use the frequency distribution from Exercise 21 in Section 2-2 to construct a histogram. Does the histogram appear to depict data that have a normal distribution? Why or why not?

12. Pulse Rates of Females Use the frequency distribution from Exercise 22 in Section 2-2 to construct a histogram. Does the histogram appear to depict data that have a normal distribution? Why or why not?

13. Earthquake Magnitudes Use the frequency distribution from Exercise 23 in Section 2-2 to construct a histogram. Using a loose interpretation of the requirements for a normal distribution, do the magnitudes appear to be normally distributed? Why or why not?

14. Earthquake Depths Use the frequency distribution from Exercise 24 in Section 2-2 to construct a histogram. Using a strict interpretation of the requirements for a normal distribution, do the depths appear to be normally distributed? Why or why not?