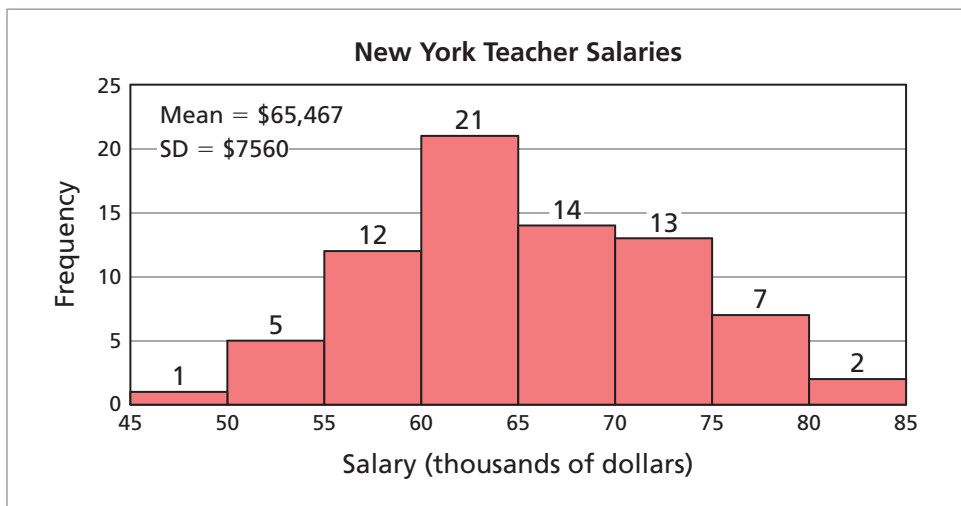


Section 9.4

Teacher Salaries The histogram shows the distribution of the salaries of 75 New York public school teachers. In Exercises 21 and 22, use the histogram.



21. Use the *Confidence Interval Calculator* at *Math.andYou.com* and a 95% confidence level to estimate the population mean salary.
22. Repeat Exercise 21 for a 99% confidence level.

Biased Samples In Exercises 23 and 24, explain why the sample may be biased. Then explain how to find an unbiased sample.

23. A politically conservative magazine wants to estimate the percent of U.S. adults who approve of the job the president is doing. The magazine sends the survey to readers on its mailing list.
24. A pollster wants to determine the percent of registered voters who voted for the Republican candidate in an election. The pollster conducts an exit poll in a primarily Republican neighborhood.
25. **Political Campaign** You work for a political campaign. You want to estimate the percent of registered voters who plan to vote for your candidate. Use the *Sample Size Calculator* at *Math.andYou.com*. Choose a 90% confidence level and a 2% margin of error. How many people should you survey to obtain reliable results?
26. **Biased Questions** Determine which question could produce biased results. Explain.

a. Do you agree with most of the students that the senator should resign?

Agree Disagree

b. Do you think the senator should resign?

Yes No

