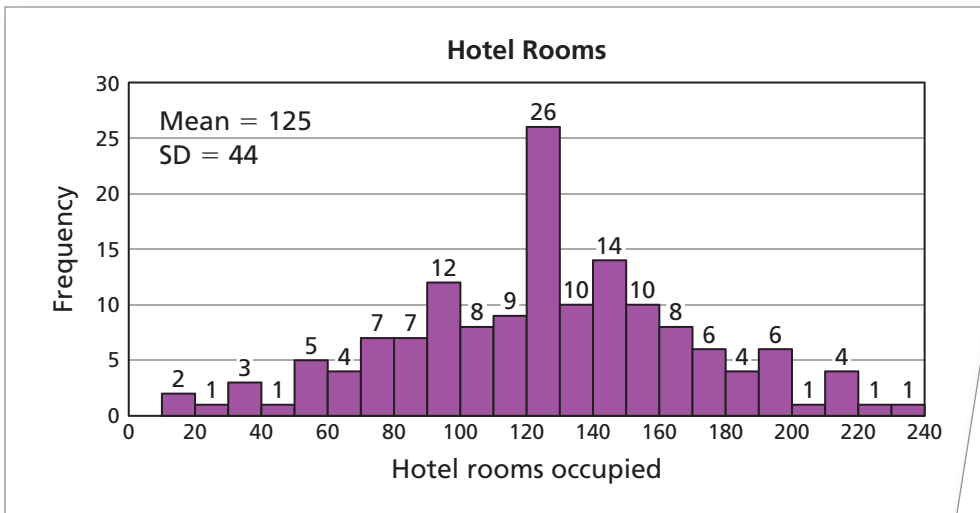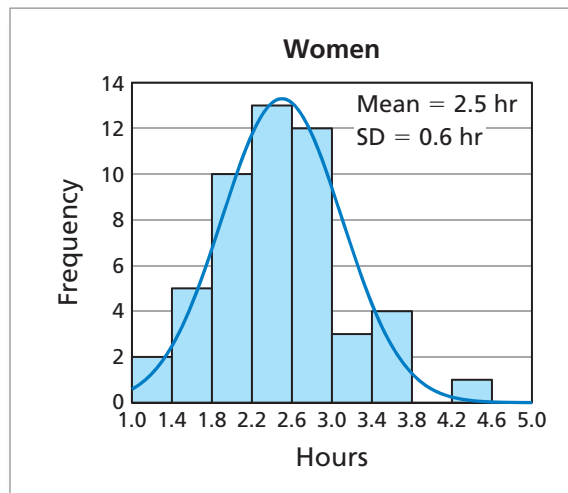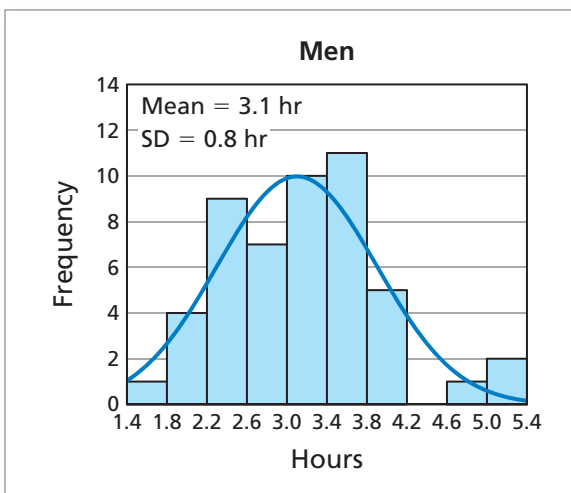# Section 9.3

Hotel Rooms **The histogram shows the distribution of the numbers of hotel rooms occupied for 150 days in a year. In Exercises 15–18, use the histogram.**

Hotel Rooms

Mean = 125
SD = 44

15. Does this data set have a normal distribution? Explain your reasoning.

16. What percent of the days lie within 1 standard deviation of the mean?

17. What percent of the days lie within 2 standard deviations of the mean?

18. Compare the percents in Exercises 16 and 17 with the percents given by the normal distribution.

Television **The histograms show the distributions of samples of hours of television watched per day by men and women. In Exercises 19 and 20, use the histograms.**

Men

Mean = 3.1 hr
SD = 0.8 hr

Women

Mean = 2.5 hr
SD = 0.6 hr

19. What is the significance of the smaller standard deviation for women?

20. Estimate the percents of men and women that watch at least 4 hours of television per day.