LESSON

Practice B

Frequency Tables, Stem-and-Leaf Plots, and Line Plots

The table shows the heights of students in Ms. Blaire's class.

| Height (in.) | | |
|--------------|--|--|
| Males | 60, 45, 48, 57, 62, 59, 57, 60, 56, 58, 61, 52, 55 | |
| Females | 49, 52, 56, 48, 51, 60, 47, 53, 55, 58, 54 | |

The following is a frequency table of the data:

Heights of Students

| 110.911.0 01 01.001.10 | | | | |
|------------------------|-----------|-------------------------|--|--|
| Height (in.) | Frequency | Cumulative Frequency | | |
| 45–49 | 5 | 5 | | |
| 50-54 | 5 | 10 | | |
| 55–59 | 9 | 19 | | |
| 60–64 | 5 | 24 | | |

- How many of the students were less than 60 in tall?
- 2. What was the most common height interval?
- How many students were over 49 inches tall?

The following is a stem-and-leaf plot of the data:

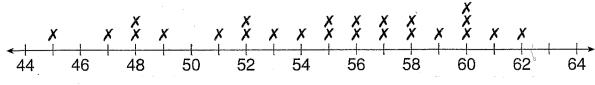
Heights of Students

| i loigillo oi otadoillo | | | | | |
|-------------------------|----------------|--|--|--|--|
| Stem | Leaves | | | | |
| 4 | 57889 | | | | |
| 5 | 12234556677889 | | | | |
| 6 | 00012 | | | | |

Key: 5 | 2 means 52

- 4. How many of the students were less than 50 inches tall?
- 5. What was the range of the data?_____
- 6. What was the height of the shortest student?the tallest?____

.The following is a line plot of the data:



- 7. Which height occurred the greatest number of times?
- 8. How many heights were between 50 and 64?_____

The list below shows the ages of all the presidents inaugurated in the twentieth century. They are then arranged in a frequency table.

42, 51, 56, 55, 51, 54, 51, 60, 62, 43, 55, 56, 61, 52, 69, 64, 46

| Ages of Twentieth Century Presidents | | | | |
|--------------------------------------|-----------|-------------------------|--|--|
| Ages | Frequency | Cumulative Frequency | | |
| 40-44 | 2 | 2 | | |
| 45–49 | 1 | 3 | | |
| 50–54 | 5 | 8 | | |
| 55–59 | 4 | 12 | | |
| 60–64 | 4 | 16 | | |
| 65–69 | 1 | 17 | | |

- 9. How many presidents were in their 50s when they took office?
- 10. How many presidents were younger than 60 years old when inaugurated?
- 11. What was the most common age range of inaugurated presidents?

The following is a stem-and-leaf plot of the data from above:

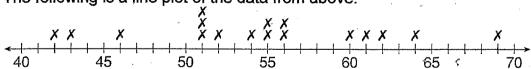
Ages of Twentieth Century Presidents

| Stems | Leaves |
|-------|-----------|
| 4 | 236 |
| 5 | 111245566 |
| 6 | 01249 |

Key: 4 | 6 means 46

- 12. What is the range of the data?
- 13. How many presidents were in their 60s when inaugurated?
- 14. What was the age of the youngest inaugurated president?

The following is a line plot of the data from above:



- 15. What is the median age? _____
- 16. How many presidents were between the age of 40 and 60 when inaugurated?
- 17. How old was the oldest president inaugurated? _____