### Quiz Review

7-1, 7-2, 7-5

# Cumulative Frequency Table 7-1

- 1) How many classes are between 20 and 40?
- 2) How many classes are below 40?
- 3) How many classes are above 50?

Classes	Frequency	Cumulative
		Frequency
0 - 10	1	1
10 - 20	4	. 5
20 - 30	3	8
39 - 40	7	15
40 - 50	7	22
50 - 60	7	29
60 - 70	1	30
Total	30 +	4.G

#### Stem and Leaf Plot 7-1

The data shows the ages of some hospital nurses.

# 33, 35, 23, 39, 23, 24, 34, 21, 57, 45, 57, 60, 45, 24, 31, 42, 61, 45, 35, 38

2. Make a stem-and-leaf plot of the data. How many nurses are over the age of 45?

Nurses'  $\Delta \sigma es$ 

Stems	Leaves
2	1 3 3 4 4
3	1 3 4 5 5 8 9
5	2 5 5 5
6	0177

*Key:* 4 | 2 *means* 42.

#### **Lesson Quiz: Part III**

The data shows the ages of some hospital nurses.

33, 35, 23, 39, 23, 24, 34, 21, 57, 45, 57, 60, 45, 24, 31, 42, 61, 45, 35, 38

**3.** Make a line plot of the data. What age occurs most often?



### **7-2** Mean, Median, Mode, and Range

#### Lesson Quiz: Part I

# Find the mean, median, mode, and range of the data set. 8, 10, 46, 37, 20, 8, and 11

mean: 20; median: 11; mode: 8; range: 38

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### **7-2** Mean, Median, Mode, and Range

Lesson Quiz: Part II

2. Identify the outlier in the data set, and determine how the outlier affects the mean, median, and mode of the data. Then tell which measure of central tendency best describes the data with and without the outlier. Justify your answer. 85, 91, 83, 78, 79, 64, 81, 97

The outlier is 64. Without the outlier the mean is 85, the median is 83, and there is no mode. With the outlier the mean is 82, the median is 82, and there is no mode. Including the outlier decreases the mean by 3 and the median by 1, there is no mode. Because they have the same value and there is no outlier, the median and mean describes the data with the outlier. The median best describes the data without the outlier because it is closer to more of the other data values than the mean.

### Measures of Variation.

Find the extremes, median, lower quartile, upper quartile, range, and IQR

1)2, 5, 2, 6, 10, 31, 4, 3

2)15, 5, 12, 15, 22, 19, 20

3) Which set of data is more consistent?

# Box and Whisker Plots 7-5

- 1) What is the range? IQR?
- 2) What is the 2<sup>nd</sup> Quartile?
- 3) What is the median?
- 4) Where is the middle 50% of the data?



# Box and Whisker Plot 7-5

- 1) Which has the greater median?
- 2) Which has the greater IQR?
- 3) Which one is more predictable?

