Math 3

Describing 1-Variable Data

LEARNING PLAN #2

(Chapter 1)

Name: _____

Date: _____

Period: A1 A2 A3 B1 B2 B3

G_

Skill/Understanding:	**Review/Practice Problems**
Data Displays ❑ I can construct a boxplot from a data set and from a 5-number summary without a calculator. ❑ I can construct a histogram from a data set without a calculator. ❑ I can interpret a box plot or histogram, including determining the center and spread of the distribution.	1-81, 1-88, 1-103, 2-12, 2-81, 3-23, 3-87
Spread ❑ I can describe the **spread** of a distribution, using range, interquartile range (IQR), or standard deviation. ❑ I can calculate IQR and range without a calculator. ❑ I can estimate IQR and range from a histogram. ❑ I can determine range and IQR from a box plot.	1-81, 1-88, 1-103, 2-12,2-81, 3-23, 3-87
Center ❑ I can describe the **center** of a distribution, using mean or median. ❑ I can calculate mean and median without a graphing calculator.	1-103, 2-12,2-81, 3-23, 3-87
Shape ❑ I can describe the **shape** of a distribution, using appropriate vocabulary such as symmetric, skewed (left or right), uniform, and unimodal (single-peaked) or bimodal (double-peaked).	1-103, 2-12, 2-81, 3-23, 3-87
Outliers ❑ I can identify **possible outliers** given a list of data, a box plot or a histogram.	1-103, 2-12, 2-81, 3-23, 3-87
Calculator Skills ❑ I can use my calculator to determine 1-variable statistics such as mean, median, standard deviation, and the first and third quartile (Q1 and Q3).	

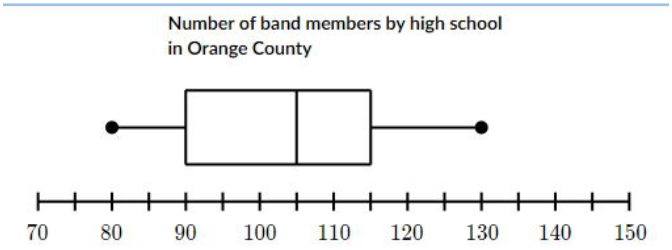
PRACTICE PROBLEMS:

1. The following data represent the weights in grams of all the kittens at the local animal shelter. Use your graphing calculator and list the five-number summary, population mean, and population standard deviation.

1104	458	899	971	1095	1212	390	575	818	1286

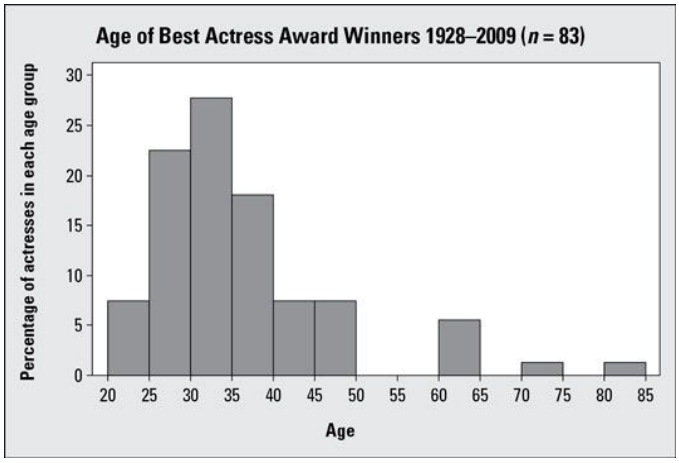
Checksum: 8808

2. The box plot below represents the number of students who are members of their school band at all the high schools in Orange County.



Describe the shape, center, spread, and outliers of the distribution, in context.

3. The relative frequency histogram below represents the ages of women who win an award for Best Actress. The age reported is the age of the woman at the time she won the award. Use the histogram to answer the following questions.



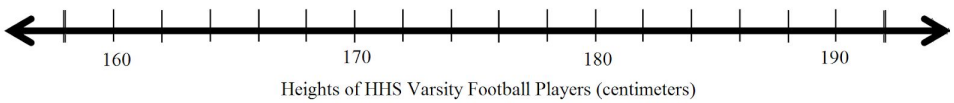
a. Approximately what percent of the Best Actress winners were between 20 and 29 years old when they won?

b. Which age group represents approximately 5% of of Best Actress winners?

c. Describe the shape, center, spread, and outliers of this distribution, in context.

4. Use the data below to draw a boxplot representing the heights of HHS football players.

Heights of HHS Football Players (centimeters)				
Minimum	1st Quartile	Median	3rd Quartile	Maximum
165	170	175	181	187



Heights of HHS Varsity Football Players (centimeters)