## Extra Practice

1) Make a line plot for each set of data. Find the mean, median, mode, range, and any outliers of the data shown in the line plot.

| 52 | 48 | 52 | 51 | Student Height in Inches |
| :---: | :---: | :---: | :---: | :---: |
| 52 | 65 | 58 | 48 |  |
| 60 | 45 | 50 | 52 |  |
| 56 | 48 | 53 | 58 | ${ }_{45} \quad 50 \quad{ }_{55} \quad{ }_{60} \quad \underset{65}{ }$ |
| 62 | 49 | 51 | 49 |  |

Mean: $\qquad$ Median: $\qquad$ Mode: $\qquad$
Range: $\qquad$ Outliers: $\qquad$
2) The table shows the daily soda sales for a restaurant. Choose intervals, make a frequency table, and construct a histogram to represent the data.
3) Use the data to create a box and whiskers plot. Find the Median, Q1, Q3, Minimum and Maximum $\{2,3,5,4,3,3$, $2,5,6\}$.

| 4 | 2 | 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Median: $\qquad$
Q: $\qquad$
Lower Extreme (Minimum)):
Upper Extreme (Maximum): $\qquad$
4) Describe how you know a question is a statistical question.
5) Find the mean, median, mode, range, IQR and Outliers for the following data.

## $1,5,9,1,2,4,8,2$

Mean:
Median: $\qquad$
Mode: $\qquad$ Range: $\qquad$
IQR: $\qquad$ Min: $\qquad$
Max: $\qquad$

## For Exercises 6 - 9, use the histogram at the right.

6) Which interval represents the least number of flowers?
7) Which interval has 5 flowers?
8) How many flowers are 24 inches tall or shorter?
9) How many flowers are at least 37 inches tall?

## For Exercises 10-13, use the histogram shown at the right.

10) Which interval represents the most number of students?
11) Which interval has three students?
12) How many students went to a pool at least ten times last summer?
13) How many students went to a pool less than ten times last summer?

Unit 6 Study Guide

1) What are the measures of center? $\qquad$
2) How do you calculate the mean? $\qquad$
3) How do you calculate the median? $\qquad$
4) What are the measures of spread? $\qquad$
5) How do you calculate the range? $\qquad$
6) How do you calculate the interquartile range (IQR)? $\qquad$
7) What do you look for in the shape of data? $\qquad$
8) Big Bob scored the following points at eight basketball games: $\{21,24,9,11,16,7,24\}$ Calculate the following:
a. Mean: $\qquad$
b. Median: $\qquad$
c. Mode: $\qquad$
d. Range: $\qquad$
9) What is a statistical question? $\qquad$

Give an example: $\qquad$

Give a non-example: $\qquad$
10) Use the following data to create a box plot:

| Ages of Students Who Downloaded "Divergent" |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | 18 | 17 | 12 | 13 | 15 | 15 | 14 | 14 |



Median: $\qquad$
$Q_{1}$ : $\qquad$
Q3: $\qquad$
Lower Extreme (Minimum)): $\qquad$
Upper Extreme (Maximum): $\qquad$
11) Which measure is MOST affected by an outlier? $\qquad$
a) Mean
b) Median
c) Mode
d) Range
12) Identify the IQR from the box plot below: $\qquad$

13) Use the box plot above to answer the following questions:
a) Minimum: $\qquad$ b) Lower Quartile ( $Q_{1}$ ): $\qquad$
c) Median: $\qquad$ d) Uppoer Quartile ( $Q_{3}$ ): $\qquad$
e) Maximum: $\qquad$ f) Range: $\qquad$
g) What percent of the data is 15 or greater? $\qquad$
h) What percent of the data is between 15 and 25 ? $\qquad$
i) The data is (Circle One): symmetrical skewed right skewed left

Use the Histogram below to answer questions 14-18.
Number of Jumping Jacks in 1 Minute

14) According to the histogram, how many students can do more than 49 jumping jacks in 1 minute? $\qquad$
15) How many students participated in the survey? $\qquad$
16) Which interval represents the mode of the histogram? $\qquad$
17) How many people did EXACTLY 45 jumping jacks? $\qquad$
18) Circle the set of intervals that CAN be used for the data in the histogram. Explain why the others cannot be used:
a) 0-3, 4-7. 8-11, 12-15, 16-19 $\qquad$
b) $0-1,2-5,6-7,8-18$ $\qquad$
c) $1-2,3-4,5-6,7-8,9-10$ $\qquad$
d) $0-5,5-10,10-15,15-20$

## Sit-Ups Completed by Students During a Fitness Test

| 13 | 13 | 10 | 14 | 15 | 12 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 17 | 12 | 18 | 14 | 15 | 12 |

