AMERICAN MATH HW
WEEK OF 24MAR TO 28MAR

Due Date: **03/30 by midnight**

Focus for the week: The focus of the HW this week is to be able to represent and interpret data. The HW for this week focuses on preparing for the **quiz on Wednesday, 03/26**. The topics in the quiz include the following:

- Frequency table
- Mean, mode, median, range
- Line plots
- Stem and leaf plot

Pacing guideline: **Look at the top right corner of the page** to see the suggested pace for the homework

Uploading Instructions: Upload homework on Archie and wait till you get the message – "**the file has been successfully uploaded**". If for any reason you have technical issues, get in touch with me as soon as possible.

IMPORTANT – Please show all your work for FULL CREDIT. If you are multiplying or dividing, I would like to see the multiplication and division sentences to see what numbers are being multiplied or divided.

Note: Bring your homework to class everyday. I will discuss the HW from the previous day in every class. It is important to practice the assigned topics daily because the next day's instruction builds on the previous lesson.

ANNOUNCEMENT – You have a quiz on Represent and Interpret Data on Wednesday, 03/26. Use the HW for Tuesday to review for the quiz.

Name _____

Stem-and-Leaf Plots

1. Use the data in the Daily Temperatures table to make a stem-and-leaf plot.

Daily Temperatures (°F)							
88	91	95	95	84	79	92	96

2. Use the data in the Minutes Spent Doing Homework table to make a stem-and-leaf plot.

Minutes Spent Doing Homework						
25	14	30	34	13	39	28

Problem Solving · Real World

3. Atul recorded the number of points his team scored in ten basketball games and put them in a table. Make a stem-and-leaf plot from the data.

Points Scored in a Game				
24	34	25	28	28
25	26	30	32	32

4. The school librarian recorded the total number of books checked out from the library each day for two weeks. She put the data in a table. Make a stem-and-leaf plot from the data.

Number of Books Checked Out				
94	72	75	87	90
83	85	94	74	88

Name _____

Use Stem-and-Leaf Plots

1. Wen used a stem-and-leaf plot to record the number of football cards that he and his friends have collected. How many friends have collected 50 or more cards?

_____

2. What is the range of the number of football cards collected?

_____

3. How many friends have collected between 30 and 50 cards?

_____

Number of Football Cards Collected

Stem	Leaves
1	9
2	3 5
3	6 8 9
4	2 2 4 8
5	1 3 5 6 9
6	1 4 7

Key: 1 | 9 represents 19 cards

4. How many more friends have collected more than 40 cards than have collected less than 40 cards?

_____

Problem Solving · Real World

5. The girls on Yu's soccer team sold boxes of cards to raise money for new uniforms. Yu recorded data about their sales in a stem-and-leaf plot. How many girls sold more than 30 boxes of cards?

_____

6. What is the median number of boxes of cards sold?

_____

7. How many girls on the team sold cards? Explain.

_____

_____

_____

Boxes of Cards Sold

Stem	Leaves
2	2 2 4
3	1 3 4 5 5 9
4	5 8 9
5	1

Key: 2 | 2 represents 22 boxes

8. Explain how the stem-and-leaf plot would change if another girl on Yu's soccer team sold 60 boxes of cards.

_____

_____

Name _____

Chapter Review

1. What is the median of the data set?

7, 3, 4, 6, 4, 6, 5, 5, 5
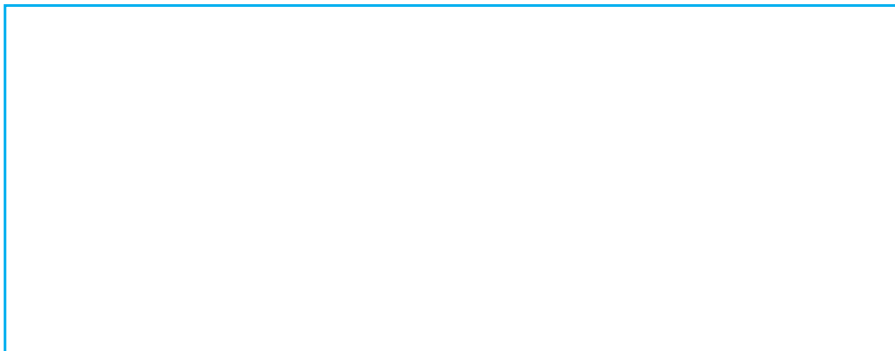
(A) 4   (B) 5   (C) 6   (D) 7

2. Janae and her classmates went to an apple orchard to pick apples. Janae recorded the number of apples some of her classmates picked.

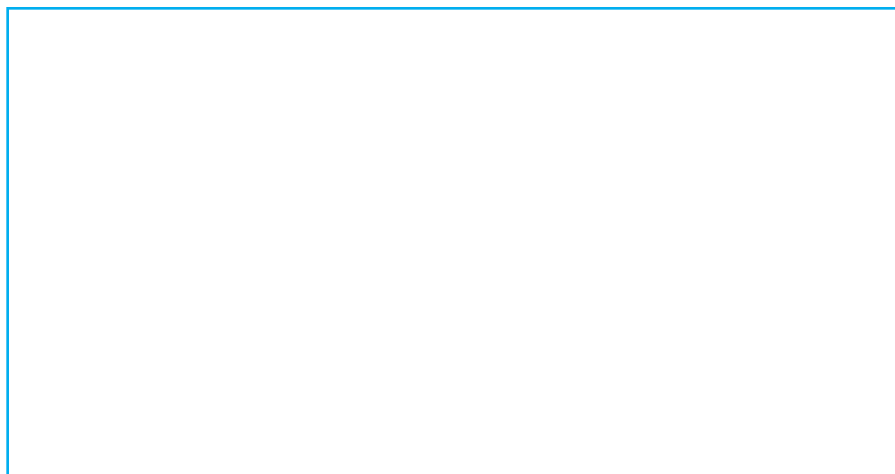| Number of Apples Picked				
7	12	9	18	24
35	18	20	20	35
25	12	18	20	20

Part A

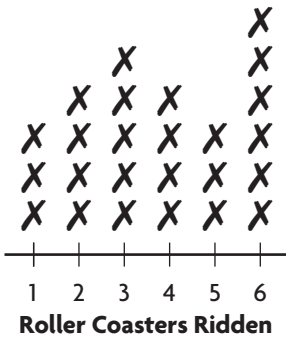Make a stem-and-leaf plot of the data.

Part B

Make a frequency table of the data.

Use the Roller Coasters Ridden line plot for Problems 3–5.

The campers from a summer camp went on a field trip to an amusement park. During the trip, Vicki recorded how many roller coasters each camper went on. She recorded the data in a line plot.

Roller Coasters Ridden

3. What is the median number of roller coasters ridden?

(A) 4

(C) 6

(B) 5

(D) 25

4. How many campers rode 2 or more roller coasters?

(A) 18

(C) 19

(B) 25

(D) 21

5. Find and explain the mode for the data.

6. Several scientists went to a field to collect various leaves. When they got back to the lab, they measured each leaf, in feet. They recorded the data in a frequency table.

How many leaves were less than $\frac{3}{8}$ ft in length?

(A) 19

(C) 7

(B) 30

(D) 9

Length of Leaves (ft)	
Length	Frequency
$\frac{1}{8}$	11
$\frac{1}{4}$	19
$\frac{3}{8}$	7
$\frac{1}{2}$	3

Name _____

Use the Amount of Raisins Used table for Problems 7 and 8.

Berto and his classmates made trail mix. They each used different amounts of raisins. Berto recorded the amounts of raisins that the classmates used.

Amount of Raisins Used (cups)				
$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{4}$
$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{4}$

7. Berto wants to make a line plot with the data. How many totals Xs will go above $\frac{1}{4}$ and $\frac{3}{4}$?

_____

8. If Berto created a frequency table with this data, what number would be in the frequency column for $\frac{1}{2}$?

_____

9. Brandon borrowed a book from the library. The data show the lengths of time Brandon read the book each day until he finished it.

Time Reading Book (h)
$\frac{1}{4}, \frac{1}{4}, 1, \frac{1}{4}, \frac{1}{2}, \frac{3}{4}, \frac{1}{2}, \frac{1}{4}$

Part A   Draw a line plot of the data.

Part B   What is the difference between the longest time and shortest time Brandon spent reading the book? Explain.

_____

_____

10. Sasha asked her friends how many books they read during their two-week vacation. She recorded their responses in a frequency table.

Number of Books Read	
Books	Frequency
1	3
2	4
3	1
4	2
5	3

Part A

How many of Sasha's friends read 1 or more books during their vacation?

(A) 8

(B) 15

(C) 13

(D) 12

Part B

What is the median number of books Sasha's friends read during their vacation?

_____ books

Part C

How does the median number of books Sasha's friends read during their vacation compare to the mode and range? Explain.

Use the Number of Goals Scored stem-and-leaf plot for Problems 11 and 12.

During the soccer season, Dora kept record of the number of goals scored by each team. At the end of the season, Dora made a stem-and-leaf plot to show the total number of goals scored by each team.

Number of Goals Scored

Stem	Leaf
1	1 4 6
2	0 4 7 8 9
3	1 2 3
4	4

Key: 1|1 represents 11 goals.

11. How many modes does the data have?

(A) 1

(C) 2

(B) There is no mode.

(D) 33

12. How many more teams scored less than 30 goals than scored more than 30 goals during the season?

(A) 3

(C) 5

(B) 8

(D) 4

13. Tuan kept track of the time he spent on the computer in a frequency table. How many more times did Tuan spend 4 hours or less than he spent 5 hours or more using the computer?

(A) 17

(C) 19

(B) 20

(D) 23

| Time Spent Using Computer (h)	
Hours	Frequency
2	12
3	10
4	13
5	5
6	9
7	1

14. Edwige asked the 3rd-grade students to find the distance that they live from the school, in miles. Edwige recorded the students' answers in a frequency table. How many total students live less than 1 mile or more than 2 miles from the school?

Distance Lived from School (m)	
Distance	Frequency
0.4	4
0.8	8
1.1	3
1.4	6
1.8	6
2.1	2
2.2	1
2.5	4

_____ students

Use the Weight of Rocks line plot for Problems 14 and 15.

Frank wants to record the weights of the different rocks in his collection. He weighs each rock in pounds and records the data in a line plot.

Weight of Rocks (lb)
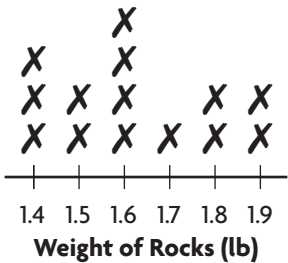
14. What is the range of the data?

(A) 0.5 lb   (C) 1.5 lb

(B) 1 lb   (D) 1.6 lb

15. How many rocks does Frank have in his collection?

(A) 10   (C) 13

(B) 11   (D) 14

Lesson Check

Fill in the bubble completely to show your answer.

Use the table at right for Problems 5–7.

The data show the number of hours 16 students exercise in one month. Jen is making a stem-and-leaf plot to display the information.

5. What are the stems for the stem-and-leaf plot?

    Ⓐ 0, 1, 2, 4, 5, 6, 7, 8, 9,   Ⓒ 1, 2, 3, 4

    Ⓑ 0, 1, 2, 3, 4   Ⓓ 2, 3, 4

Number of Hours Exercised in One Month			
18	28	22	20
34	30	19	25
42	19	27	41
25	38	26	28

6. Which stem has the most leaves?

    Ⓐ 1   Ⓒ 3

    Ⓑ 2   Ⓓ 4

7. How many more leaves are there for 2 than there are for 3 and 4 combined?

    Ⓐ 5   Ⓒ 3

    Ⓑ 2   Ⓓ 1

Lesson Check

Fill in the bubble completely to show your answer.

Use the table at right for Problems 9–11.

9. The stem-and-leaf plot at the right shows the ages of people who attended a dog obedience class. What was their median age?

   Ⓐ 9

   Ⓑ 21

   Ⓒ 23

   Ⓓ 33

Ages of People Who Attended a Dog Obedience Class

Stem	Leaves
0	9
1	2 5 5 5 8 9
2	1 3 4 4 6
3	3 4
4	2

Key: 0 | 9 represents 9 years of age

10. Which age group was most widely represented at the class?

    Ⓐ teens   Ⓒ thirties

    Ⓑ twenties   Ⓓ forties

11. How many more people were over 20 years old than were under 20 years old?

    Ⓐ 8   Ⓒ 2

    Ⓑ 1   Ⓓ 7