Mad Minute Averages

Name Date

week of 8-8	week of 8-15	week of 8-22	week of 8-29
Mon. 16=40%.	Mon. 14=35%.	Mon. 11=28%.	Mon. 10=25%.
Tues. 14=35%.	Tues.	Tues. 13=33%.	Tues. 12=30%.
Wed. 13=33%.	Wed.	Wed. 19=48%.	Wed.
Thurs. 18=45%.	Thurs.	Thurs. 17=43%.	Thurs.
Fri. 15=38%.	Fri.	Fri. 13=33%.	Fri.

week of 9-5	week of 9-12	week of 9-19	
Mon. Labor Day	Mon. 17=43%.	Mon. 18=45%.	Mon.
Tues. 17=43%	Tues.	Tues.	Tues.
Wed. 19=48%.	Wed.	Wed.	Wed.
Thurs.	Thurs.	Thurs.	Thurs.
Fri.	Fri.	Fri.	Fri.

Mon.	Tues.	Wed.	Thurs.	Fri.
Mon.	Tues.	Wed.	Thurs.	Fri.

	Week	Average	Parent Signature	Week	Average	Parent Signature
×	one	15=38%		÷ six		
×	two	17=43%		seven		
÷	three	15=38%		eight		
÷	four	16=40%		nine		
×	five	16=40%		ten		

NAME _____ DATE _____ PERIOD ____

2-1 Study Guide and Intervention

Frequency Tables

Statistics involves collecting, organizing, analyzing, and presenting data. **Data** are pieces of information and are usually numbers. You can organize data by making a frequency table. A **frequency table** shows the number of times each piece of data appears.

The parts of a frequency table:

- **Scale:** lets you record all of the data; includes the least and the greatest number
- **Interval:** separates the scale into equal parts
- **Tally marks:** lets you record a mark each time a piece of data appears
- **Frequency:** gives the sum of the tally marks for each category

EXAMPLE 1 SCHOOL **Vinnie recorded his scores on this month's math quizzes. Make a frequency table of the data. Which score did Vinnie get most often?**

My Quiz Scores			
9	8	9	5
5	9	6	2
9	8	9	4

Step 1 Choose a scale and interval. A scale that includes all the data is 0 to 10. An interval that separates the scale into equal parts is 2.

Step 2 Draw a table with three columns and label the columns.

Step 3 List the intervals, tally the data, and add the tallies.

My Quiz Scores		
Score	Tally	Frequency
1–2	|	1
3–4	|	1
5–6	|||	3
7–8	||	2
9–10	𝍸	5

Since the quiz score 9 has the greatest number in the frequency column, Vinnie scored 9 most often.

Lesson 2-1

EXERCISES

MUSIC Use the table that shows the number of hours the band members practiced in a week.

Hours Spent Practicing				
3	4	3	5	2
2	3	4	3	1
3	2	1	5	2
4	1	3	2	1

1. Make a frequency table for the data.

Band Practice

Hours	Tally	Frequency
1-2	𝍸 ||||	9
3-4	𝍸 ||||	9
5-6	||	2

2. Which number of hours practicing is most common? see notes

3. How many band members practiced more than 4 hours a week?

Two of the band members practiced more than 4 hours.

1)

Hours	Tally	Frequency
1	1111	4
2	1111	5
3	1111 1	6
4	111	3
5	11	2

The most common number of hours spent practicing during the week is 3. There were 6 people who practiced for 3 hours each.

NAME _____ DATE _____ PERIOD ____

2-1

Practice: Word Problems

Frequency Tables

ANIMALS For Exercises 1–3, use Table A. For Exercises 4–6, use Table B.

Table A

Insects Under a Rock					
E	S	B	E	E	B
S	E	E	B	S	E
S	S	B	E	E	S
B	E	E	E	B	E
S	E	B	S	E	E
B	S	E	E	S	E

B = beetle E = earwig
S = sow bug

Table B

Weights (lb) of Dogs at Vet Clinic		
Weight	Tally	Frequency
1–10	1111 1111 1111	14
11–20	1111 1111 1111 1111	19
21–30	1111 1111 1111 1111 1111	25
31–40	1111 1111	10
41–50	1111	5

1. Maria is counting three types of insects she finds under rocks in the park for an ecology survey. Make a frequency table showing her data from Table A.

2. How many more earwigs did Maria find than beetles?

3. When Maria writes her report, she will list the insects in order of most common to least common. What order should she write in her report?

largest freq.
smallest frequency

4. The strength of medicine given to a dog depends on the dog's weight. There is a different strength for each weight group. For which weight group should a veterinarian order the most medicine? the least medicine?

see notes

5. Describe the scale and the interval in Table B.

(Range) Scale: 1 to 50
The scale is 1 to 50.
The interval is 10.

6. How many more dogs are in the most frequent group than in the second most frequent group?

19
25
25 − 19 = 6

There are 6 more dogs that weigh 21-30 pounds than weigh 11-20 pounds.

Lesson 2–1

4) The vet clinic will need to buy the most medicine for dogs weighing 21-30 pounds.

The vet clinic will need to buy the least medicine for dogs weighing 41-50 pounds.

NAME _____ DATE _____ PERIOD ____

2-2 Study Guide and Intervention

Bar Graphs and Line Graphs

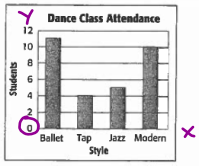
A **graph** is a visual way to display data. A **bar graph** is used to compare data. A **line graph** is used to show how data changes over a period of time.

EXAMPLE 1 **Make a bar graph of the data. Compare the number of students in jazz class with the number in ballet class.**

Dance Classes	
Style	Students
Ballet	11
Tap	4
Jazz	5
Modern	10

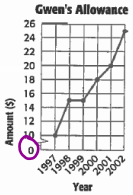
Step 1 Decide on the scale and interval.
Step 2 Label the horizontal and vertical axes.
Step 3 Draw bars for each style.
Step 4 Label the graph with a title.

About twice as many students take ballet as take jazz.



EXAMPLE 2 **Make a line graph of the data. Then describe the change in Gwen's allowance from 1998 to 2002.**

Gwen's Allowance						
Year	1997	1998	1999	2000	2001	2002
Amount ($)	10	15	15	18	20	25



Step 1 Decide on the scale and interval.
Step 2 Label the horizontal and vertical axes.
Step 3 Draw and connect the points for each year.
Step 4 Label the graph with a title.

Gwen's allowance did not change from 1998 to 1999 and then increased from 1999 to 2002.

EXERCISES

Make the graph listed for each set of data.

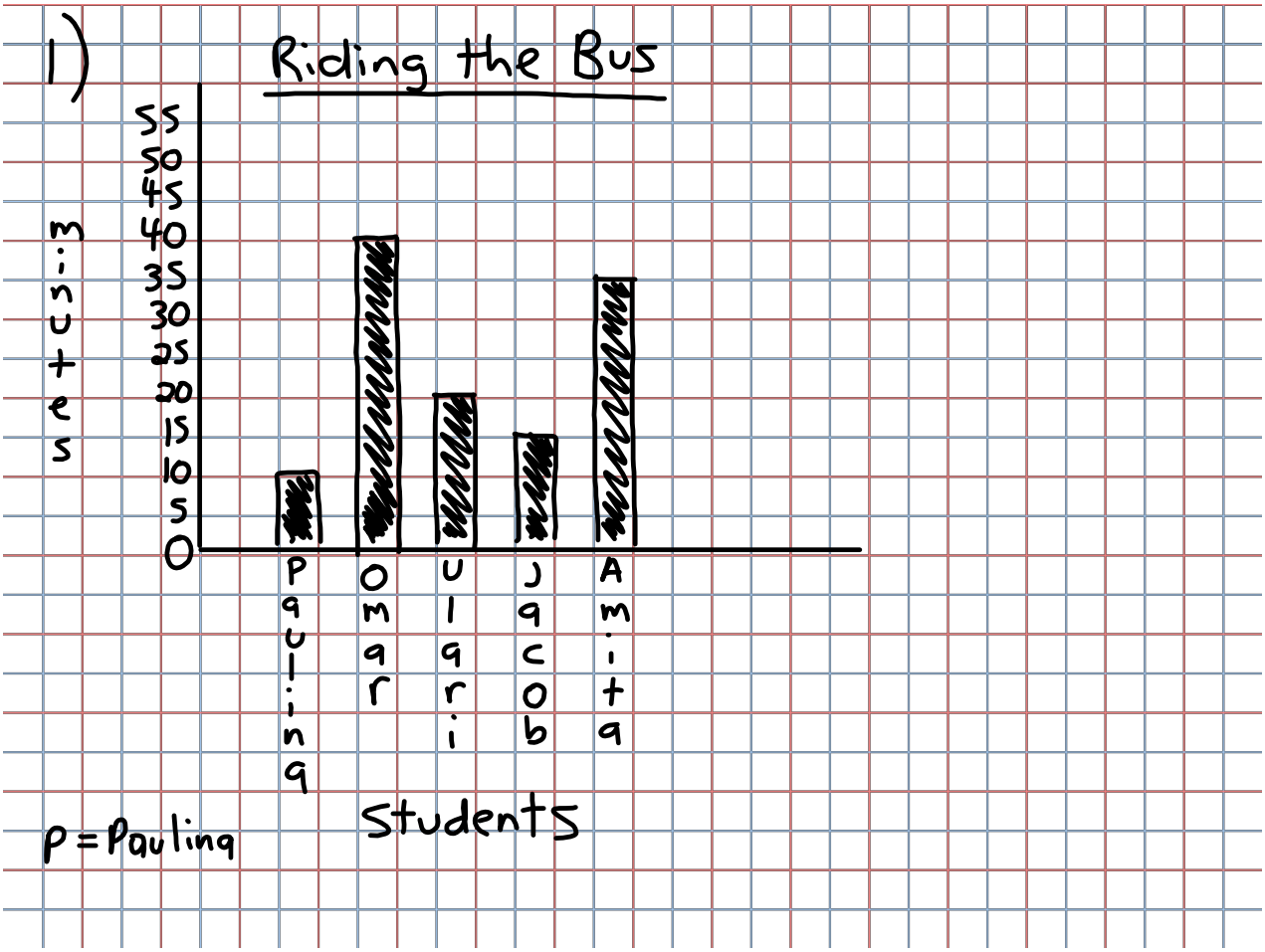
1. bar graph

Riding the Bus	
Student	Time (min)
Paulina	10
Omar	40
Ulari	20
Jacob	15
Amita	35

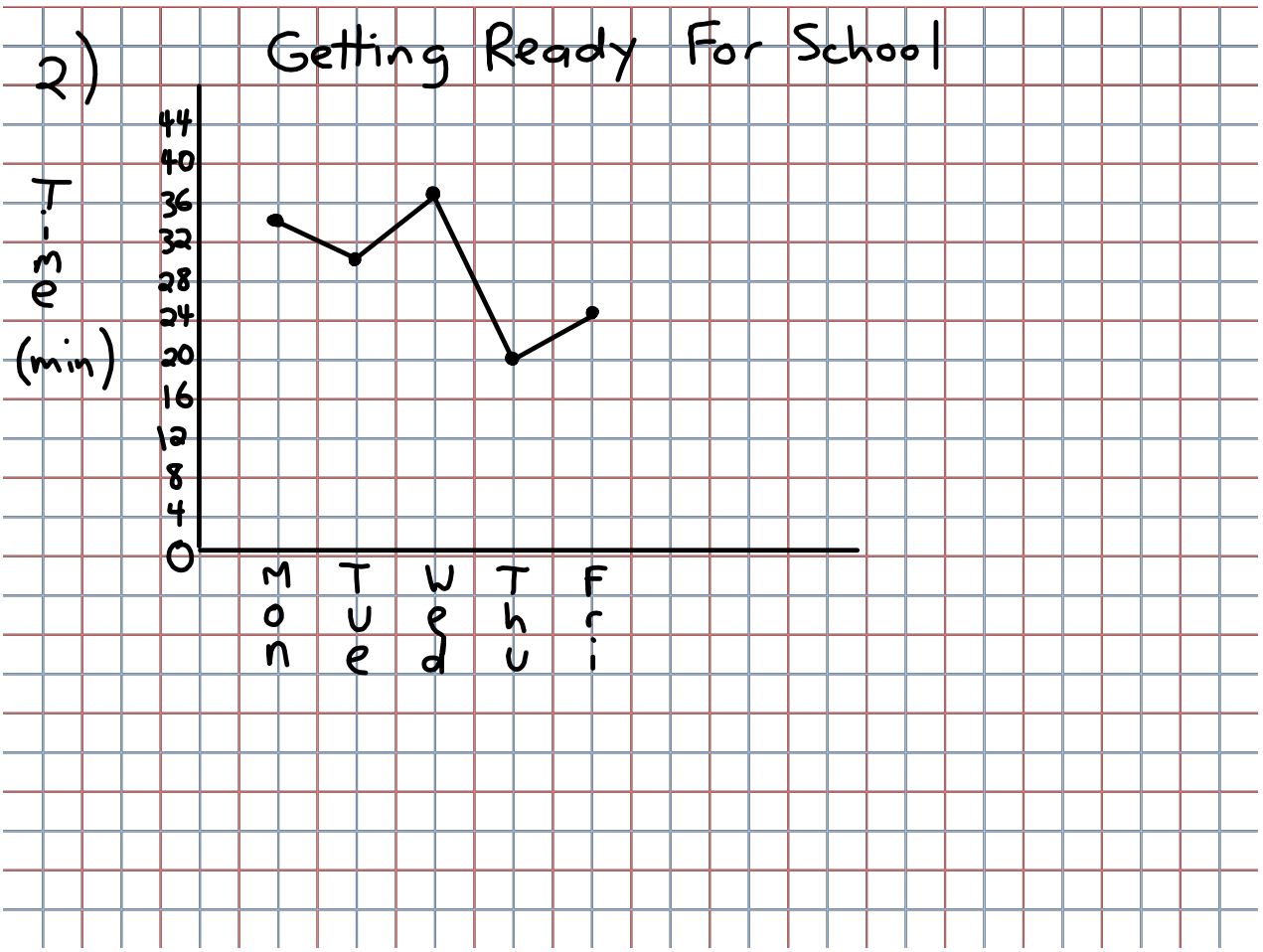
2. line graph

Getting Ready for School	
Day	Time (min)
Monday	34
Tuesday	30
Wednesday	37
Thursday	20
Friday	25

1)


Riding the Bus
minutes
55
50
45
40
35
30
25
20
15
10
5
0
Pauling
Omar
Ulgri
Jacob
Amita
Students
P=Pauling

2)


Getting Ready For School
Time (min)
44
40
36
32
28
24
20
16
12
8
4
0
Mon
Tue
Wed
Thu
Fri

NAME _____ DATE _____ PERIOD ____

2-2 Practice: Word Problems

Bar Graphs and Line Graphs

TREES For Exercises 1, 3, and 4, use Table A. For Exercises 2, 5, and 6, use Table B.

Table A

Average Heights of Pine Trees	
Tree	Height (ft)
Eastern White	75
Lodgepole	48
Longleaf	110
Pitch	55
Ponderosa	140

Table B

Lemons Produced by My Tree	
Year	Number of Lemons
1999	26
2000	124
2001	122
2002	78
2003	55

1. You and Jorge are writing a report on different kinds of pine trees. Make a bar graph for the report that shows the average heights of different kinds of pine trees. Use the data from Table A.

2. Table B shows the number of lemons your tree produced each year. Make a line graph for the data in Table B.

3. Use your graph for Exercise 1. Which tree is about half as tall as a ponderosa?

4. How does the average height of a pitch pine compare to the average height of a lodgepole pine?

5. Use the line graph you made in Exercise 2. Describe the change in fruit production for your lemon tree.

6. **FRUIT** Suppose you want to make a graph of the total number of lemons produced by your lemon tree and the total number of oranges produced by your orange tree in one year. Would you make a bar graph or a line graph? Explain.

NAME _____ DATE _____ PERIOD ____

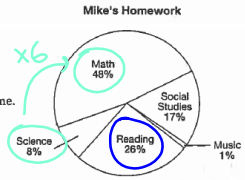
2-3 Study Guide and Intervention

Circle Graphs

A **circle graph** is used to compare parts of a whole. The pie-shaped sections show the groups. The percents add up to 100%.

EXAMPLES

1 **SCHOOL** **The circle graph shows the subjects Mike studies during homework time. Which subject does Mike spend most of his time studying?**



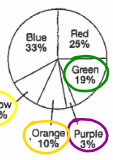
The largest section of the graph is the section representing math. So, math takes up the most time.

2 **How does the time spent studying social studies compare to the time spent studying science?**

The section representing social studies is about twice the size of the section representing science. So, twice as much time is spent on social studies as on science.

EXERCISES

SURVEYS **Use the graph that shows the results of a favorite colors survey.**



1. Which color is the least favorite?
The least favorite color is purple.
2. Which colors are the favorites of the same number of people?
Yellow and orange are the favorite colors of the same number of people.
3. How does the number of people who say green is their favorite color compare to the number who say yellow is their favorite color? About twice as many people prefer green to yellow.

SCHOOL **Use the graph of Mike's study time from the Examples.**

4. Which subject does Mike spend the least time studying?
Mike spends the least amount of time studying music.
5. On which two subjects together does Mike spend about the same time as reading?
Science and Social Studies combined are about the same as Reading.
6. How does the amount of time spent on math compare to the amount of time Mike spends on science?
Mike spends 40% more time studying Math than Science.
Mike spends six times the amount of time studying Math over Science.

48 − 8 = 40

Lesson 2–3

NAME _____ DATE _____ PERIOD ____

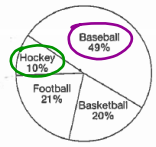
2-3 Practice: Word Problems

Circle Graphs

SPORTS For Exercises 1–3, use Graph A. For Exercises 4–6, use Graph B.

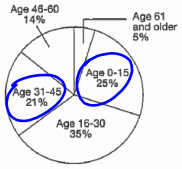
Graph A

Favorite Sports of Mr. Franco's Class



Graph B

Attendance at the Baseball Game



1. Kwan surveyed Mr. Franco's class to find out the favorite sports of the class. Which sport was the favorite of the largest percent of students in the class? Which sport was the favorite of the smallest percent of students?	2. Which sports were the favorite of about the same number of students?
3. Which sport is the favorite of half as many students as basketball?	4. Mr. Jackson kept track of attendance at the baseball game for an advertising agency. The agency wants to target its advertising to the age group that has the highest percent in attendance. To which group should the agency target ads?
5. Which two age groups have about the same percent of people?	6. Mr. Jackson's daughter is in the age group with the second highest percent. In which age group is Mr. Jackson's daughter?

Lesson 2–3

NAME _____ DATE _____ PERIOD ____

2-4 Study Guide and Intervention

Making Predictions

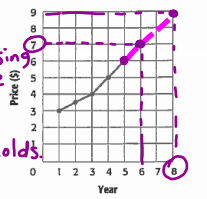
Because they show trends over time, **line graphs** are often used to predict future events.

EXAMPLE 1 **The graph shows the time Ruben spends each day practicing piano scales. Predict how much time he will spend practicing his scales on Friday.**

Continue the graph with a dotted line in the same direction until you reach a vertical position for Friday. By extending the graph, you see that Ruben will probably spend half an hour practicing piano scales on Friday.

EXERCISES

MONEY Use the graph that shows the price of a ticket to a local high school football game over the last few years.



increasing

1. Has the price been increasing or decreasing? Explain. The price has been increasing each year. We can tell since the line is going up.
2. Predict the price of a ticket in year 6 if the trend continues. A reasonable prediction is $7.00 per ticket if the trend holds.
3. In what year do you think the price will reach $9.00 if the trend continues? The price will reach $9 in the 8th year if the trend continues.

BANKS Use the graph that shows the interest rate for a savings account over the last few years.

decreasing

4. What does the graph tell you about interest rates?
5. If the trend continues, when will the interest rate reach 1 percent?

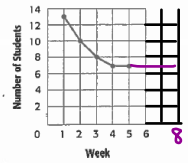
NAME _____ DATE _____ PERIOD ____

2-4 Practice: Word Problems

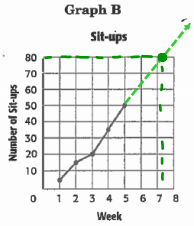
Making Predictions

FITNESS For Exercises 1–3, use Graph A. For Exercises 4–6, use Graph B.

Graph A



Graph B



1. Refer to Graph A. Describe the change in the number of students taking the aerobics class.	2. Predict how many students will be in the aerobics class in week 6 if the trend continues. There will be the 7 people in the class if the trend continues.
3. Predict how many students will be in the aerobics class in week 8.	4. Describe the change in the number of sit-ups Cara can do.
5. Predict how many sit-ups Cara will be able to do in week 6 if the trend continues.	6. Predict the week in which Cara will be able to do 80 sit-ups if the trend continues.

NAME _____ DATE _____ PERIOD ____

2-5 Study Guide and Intervention

Stem-and-Leaf Plots → smallest place value

Lesson 2-5

Sometimes it is hard to read data in a table. You can use a **stem-and-leaf plot** to display the data in a more readable way. In a stem-and-leaf plot, you order the data from least to greatest. Then you organize the data by place value.

EXAMPLE 1 **Make a stem-and-leaf plot of the data in the table. Then write a few sentences that analyze the data.**

Step 1 Order the data from least to greatest.
41 51 52 53 55 60 65 65 67 68 70 72

Step 2 Draw a vertical line and write the tens digits from least to greatest to the left of the line.

Step 3 Write the ones digits to the right of the line with the corresponding stems.

Money Earned Mowing Lawns ($)			
60	55	53	41
67	72	65	68
65	70	52	51

Stem	Leaf
4	1
5	1 2 3 5
6	0 5 5 7 8
7	0 2

In this data set, the tens digits form the stems. → ← The ones digits of the data form the leaves.

6|5 = $65

Always write each leaf, even if it repeats. Key

Step 4 Include a key that explains the stems and leaves.

By looking at the plot, it is easy to see that the least amount of money earned was $41 and the greatest amount was $72. You can also see that most of the data fall between $51 and $68.

EXERCISES

Make a stem-and-leaf plot for the set of data below. Write a few sentences that analyze the data.

least 22, 34, 41, 44, 47, 48, 51, 55, 55 greatest

Stem	Leaf
2	2
3	4
4	1 4 7 8
5	1 5 5

4|7 = 47

The smallest number is 22.
The greatest number is 55.
} The range is 33. 55-22=33

The group of ten with the most values is the 40s.

Most of the numbers are in the 40s and 50s.

NAME ________________ DATE __________ PERIOD ____

2-5 Practice: Word Problems

Stem-and-Leaf Plots

Lesson 2–5

TRAFFIC For Exercises 1 and 2, use the table. For Exercises 3 and 4, use the stem-and-leaf plot.

Number of Trucks Passing Through the Intersection Each Hour

5	15	6	42	34	28
19	18	19	22	23	21
32	26	34	19	29	21
10	6	8	40	14	17

Number of Birds at a Watering Hole Each Hour

Stem	Leaf
1	8 9
2	4 8 9
3	3 4 4 4
4	2 5 5 5 5 7 8
5	0 0 3 3 4 6 6 7

3|4 = 34 birds

1. Mr. Chin did a traffic survey. He wrote down the number of trucks that passed through an intersection each hour. Make a stem-and-leaf plot of his data.

Stem	Leaf
0	5 6 6 8
1	0 4 5 7 8 9 9 9
2	1 1 2 3 6 8 9
3	2 4 4
4	0 2

1|9 = 19

2. Refer to your stem-and-leaf plot from Exercise 1. Mr. Chin needs to know the range of trucks passing through the intersection in one hour into which the greatest number of hours fall.

The range of 10-19 trucks has the largest number of values.

3. What is the least number of birds at the watering hole in one hour? What is the greatest number?

4. What is the most frequent number of birds to be at the watering hole in one hour?

The most frequent number of birds to be at the watering hole in one hour is 45 birds.

5. RVs Make a stem-and-leaf plot for the number of RVs Mr. Chin counted in 12 hours: 3, 4, 9, 13, 7, 9, 8, 5, 4, 6, 1, 11.

Stem	Leaf
0	1 3 4 4 5 6 7 8 9 9
1	1 3

6. RVs Write a few sentences that analyze the RV data for Mr. Chin's report in Exercise 5.

The range of values is from 1 to 13. He saw 9 or fewer RVs during most hours.

NAME ________________ DATE __________ PERIOD ____

2-6 Study Guide and Intervention

Mean

The **mean** is the most common measure of central tendency. It is an average, so it describes all of the data in a data set.

EXAMPLE 1 **The prices of twelve different jackets are shown. Find the mean.**

Jacket Prices ($)

25	34	39	41
45	52	27	22
56	61	15	27

mean $= \frac{25 + 34 + 39 + \ldots + 27}{12}$ ← sum of the data / ← number of data items

$= \frac{444}{12}$ or 37

The mean price of a jacket is $37.

A set of data may contain very high or very low values. These values are called outliers.

EXAMPLE 2 **Find the mean for the snowfall data with and without the outlier. Then tell how the outlier affects the mean of the data.**

Month	Snowfall (in.)
Nov.	20
Dec.	19
Jan.	20
Feb.	17
Mar.	4

Compared to the other values, 4 inches is low. So, it is an outlier.

mean with outlier

mean $= \frac{20 + 19 + 20 + 17 + 4}{5}$

$= \frac{80}{5}$ or 16

mean without outlier

mean $= \frac{20 + 19 + 20 + 17}{4}$

$= \frac{76}{4}$ or 19 ↑

With the outlier, the mean is less than the values of most of the data. Without the outlier, the mean is close in value to the data.

EXERCISES

Find the mean for each set of data.

1. 11, 8, 7, 12, 10, 9, 13, 26 outlier
   see notes

2. 15, 10, 9, 17, 24, 27, 39, 15, 24

3. 26, 19, 29, 15, 2, 31, 56, 30

4. 108, 121, 73, 79, 56, 91

5. Find the mean for the set of data in Exercise 1 without the outlier. Then tell how the outlier affects the mean of the data.

10 → 12 ↑
The outlier of 26 increases the mean from 10 to 12.

Sum 96 (with 26)
− 26
New sum = 70

Mean (Avg) = 10
7|70

1) 11, 8, 7, 12, 10, 9, 13, 26

(1) (2) (3) (4) (5) (6) (7) (8)

19 19 19 39

57

+39

Sum = 96

$8 \overline{)96}$ 12 Mean

-8

16

-16

0

NAME _____ DATE _____ PERIOD ____

2-6 Practice: Word Problems

Mean

ANIMALS For Exercises 1–3, use the table about bears.

Bear	Average Height (ft)	Average Weight (lb)
Alaskan Brown	8	1,500
Black	6	338
Grizzly	7	538
Polar	7	850

1. You are writing a report on bears. You are analyzing the data on heights and weights in the table above. First look for outliers. Identify the outlier for the height data. Identify the outlier for the weight data.

2. Find the mean of the bear weight data with and without the outlier.

3. Describe how the outlier affects the mean of the bear weight data.

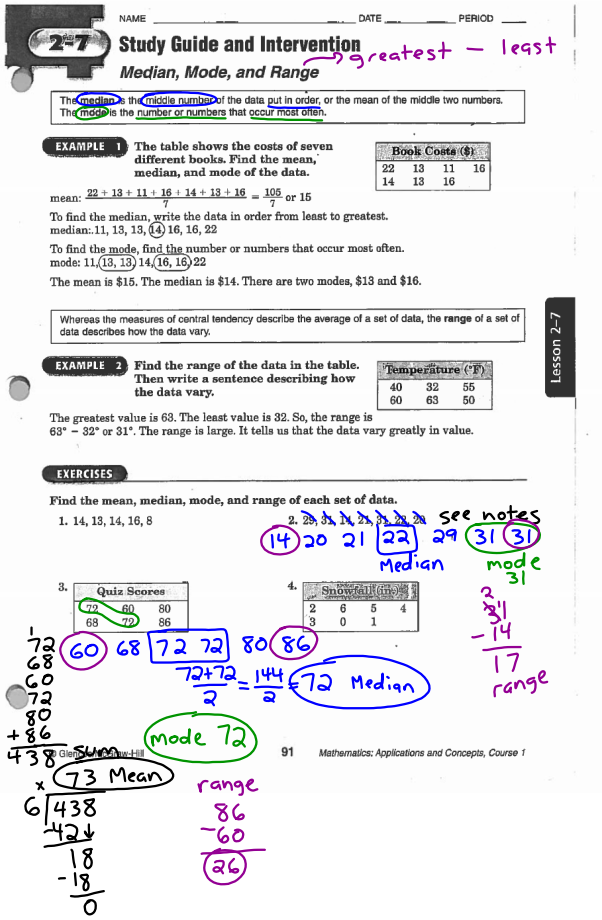
4. **WORK** Carlos earned $23, $29, $25, $16, and $17 working at an ice cream shop after school. What is the mean amount he earned?

5. **CARS** The cost of a tank of gas at nine different gas stations is shown below. What was the mean cost of a tank of gas?

   Cost of Gas: $17, $18, $22, $15, $17, $16, $25, $21, and $20

6. **SCHOOL** Sally received scores on math quizzes as shown below. Find her mean score with and without both outliers.

   Quiz Scores: 84, 85, 91, 81, 52, 92, 99, 91, and 45



NAME _____ DATE _____ PERIOD ____

2-7 Study Guide and Intervention

Median, Mode, and Range → greatest − least

The median is the middle number of the data put in order, or the mean of the middle two numbers.
The mode is the number or numbers that occur most often.

EXAMPLE 1 The table shows the costs of seven different books. Find the mean, median, and mode of the data.

Book Costs ($)			
22	13	11	16
14	13	16	

mean: $\frac{22 + 13 + 11 + 16 + 14 + 13 + 16}{7} = \frac{105}{7}$ or 15

To find the median, write the data in order from least to greatest.
median: 11, 13, 13, (14) 16, 16, 22

To find the mode, find the number or numbers that occur most often.
mode: 11, (13, 13) 14, (16, 16) 22

The mean is $15. The median is $14. There are two modes, $13 and $16.

Whereas the measures of central tendency describe the average of a set of data, the **range** of a set of data describes how the data vary.

EXAMPLE 2 Find the range of the data in the table. Then write a sentence describing how the data vary.

Temperature (°F)		
40	32	55
60	63	50

The greatest value is 63. The least value is 32. So, the range is 63° − 32° or 31°. The range is large. It tells us that the data vary greatly in value.

Lesson 2–7

EXERCISES

Find the mean, median, mode, and range of each set of data.

1. 14, 13, 14, 16, 8

2. 29, 31, 14, 21, 31, 22, 20 — see notes

14 20 21 22 29 31 31 — Median; mode 31

3.

Quiz Scores		
72	60	80
68	72	86

1 72 68 60 72 80 +86 438 — Sum

60 68 72 72 80 86 — $\frac{72+72}{2} = \frac{144}{2} = 72$ Median; mode 72

438 ÷ 6 = 73 Mean

range: 86 − 60 = 26

4.

Snowfall (inches)			
2	6	5	4
3	0	1	

2 3 3 1 −14 17 range

First Last Name JMJ

Math

9/15/16

2-7 p. 91 Front

29, 31, 14, 21, 31, 22, 20

60 52 42

74 94

94 + 74

Sum = 168

168 ÷ 7 = 24 → Mean

−14

28

−28

0

NAME _____ DATE _____ PERIOD ____

2-7 Practice: Word Problems

Median, Mode, and Range

SCIENCE For Exercises 1–3, use Table A. For Exercises 4–6, use Table B. Table A shows the number of days it took for some seeds to germinate after planting. Table B shows how tall the plants were after 60 days.

Table A

Number of Days for Seeds to Germinate				
~~15~~	20	~~30~~	15	~~16~~
~~9~~	21	21	~~15~~	

Table B

Height (in.) of Plants After 60 Days				
17	19	13	17	20
15	17	21	14	

1. Refer to Table A. You are doing some experiments with germinating seeds. You are preparing a report on your findings to a seed company. What are the mean, median, and mode of the data?

9 15 15 15 16 20 21 21 30

2. Use your answer from Exercise 1. Which measure of central tendency best describes the data? Explain.

3. What is the range of the seed germination data? Describe how the data vary.

30 − 9 = 21

range = 21

The numbers in the middle are close together while the lowest and highest are far apart from them. The most common number is 15 days to germinate.

4. What are the mean, median, and mode of the plant height data?

5. Refer to your answer in Exercise 4. Which measure of central tendency best describes the data? Explain.

6. What is the range of the plant height data? Describe how the data vary.

Lesson 2–7

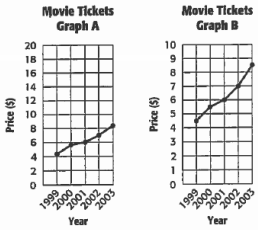
NAME _____ DATE _____ PERIOD ____

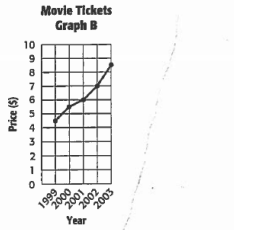
2-8 Study Guide and Intervention

Analyzing Graphs

Graphs can lead readers to the wrong conclusion about the data when the numbers on either scale are inconsistent, the vertical or horizontal scale does not start at zero, or different scales are used.

EXAMPLE 1 **The graphs at the right show how the cost of a movie increased over time. Which graph appears to show that the cost increased more quickly? Explain.**





Both graphs show the same data, but Graph B appears to show the cost increasing more quickly. Graph A uses a scale of 2 and Graph B uses a scale of 1.

Using an inappropriate measure of central tendency can cause readers to make a wrong conclusion.

EXAMPLE 2 **Refer to the table. The store says the average price of an electronic pet is $12. Explain how using this average to attract customers with low prices is misleading.**

Electronic Pet Prices ($)				
14	15	15	20	49
21	12	12	20	12

Order the data from least to greatest: 12, 12, 12, 14, 15, 15, 20, 20, 21, 49.
mean: $19 median: $15 mode: $12

The store used the mode as the average. Because the mode price is less than the other prices, it is not the most accurate average to use.

EXERCISES

1. In Example 1, how could you change Graph A to appear to show that the cost rose more slowly? We could use a larger interval along the vertical axis.
2. Oleta's test scores in order from least to greatest were 19, 75, 76, 82, 83. Find the mean, median, and mode of the data. Which measure might be misleading in describing the average number of points Oleta earned.

outlier is going to drop the overall mean

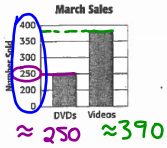
NAME _____ DATE _____ PERIOD ____

2-8 Practice: Word Problems

Analyzing Graphs

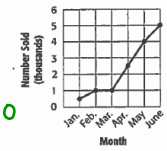
BUSINESS For Exercises 1 and 2, use Graph A. For Exercises 3 and 4, use Graphs B and C. The graphs show the number of DVDs and videos sold by a video store.

Graph A

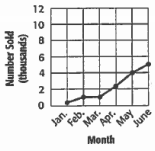


≈ 250 ≈390

Graph B



Graph C



1. About how many times fewer DVDs than videos appear to have been sold?

About 1.5 times as many videos were sold as DVDs.

2. Explain how Graph A is misleading.

The scale and intervals are inconsistent. It starts at 0, counts by 200, then by 50s.

3. The graphs show the same data. Which graph appears to shows that the number of DVDs and videos sold increased more rapidly? Explain.

4. The store owner is trying to get a loan from the bank and wants to show that business is good. Which graph should the store owner show the bank? Explain.

5. **MARKETING** A store advertises that it has the lowest average price for T-shirts in town. Find the mean, median, and mode of the prices.

T-Shirt Prices:
$14, ~~$5~~, $10, $12, ~~$5~~, ~~$4~~, $13

Mean
7 | $63
→ $9

Median
4, 5, 5, 10, 12, 13, 14

Mode: $5

6. **MARKETING** Use your answer from Exercise 5. Which measure of central tendency describes the average T-shirt price the most accurately? Explain.