

AMERICAN MATH HW
WEEK OF March 16-20

Due Date: Sunday, 3/22 by midnight

Focus for the week: The focus of the HW this week is metric conversions, statistics: mode, median, mean, and graphs and data displays.

Pacing guideline: Look at the top right corner of the page for the suggested pace.

Uploading Instructions: Homework will be accepted only through Archie. 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.

Paper homework is accepted for valid reasons. In such cases, parents should reach out via email to inform about the same.

IMPORTANT – Please show ALL YOUR WORK done to find the answer to any problem to earn FULL CREDIT. No credit is earned when only final answer is written and no work is shown.

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 – Test next week on Measurement.

Additional Practice Material (Optional):

- 1) IXL practice:
 - i. Go to IXL.com on any web browser OR IXL app on iPad
 - ii. Login using following credentials:
 - Username – your_archie_username@archimedeanacad
 - Password – archie199
 - iii. Go to Learning> Skills> Fourth Grade Math
 - iv. Practice modules –
Fourth Grade : BB and CC

Solve Multi-step Metric Measurement Problems

Go Online

Interactive Examples

Convert.

1. $16 \text{ m} = \frac{16,000}{\text{number of meters}} \text{ mm}$ 2. $6,500 \text{ cL} = \underline{\hspace{2cm}} \text{ L}$ 3. $15 \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$

$\frac{\text{millimeters in 1 meter}}{1,000} = \frac{\text{number of millimeters}}{16,000}$

$16 \times 1,000 = 16,000$

$16 \text{ m} = 16,000 \text{ mm}$

4. $3,200 \text{ L} = \underline{\hspace{2cm}} \text{ kL}$ 5. $12 \text{ L} = \underline{\hspace{2cm}} \text{ mL}$ 6. $200 \text{ cm} = \underline{\hspace{2cm}} \text{ m}$


7. $70,000 \text{ m} = \underline{\hspace{2cm}} \text{ km}$ 8. $100 \text{ dL} = \underline{\hspace{2cm}} \text{ L}$ 9. $60 \text{ m} = \underline{\hspace{2cm}} \text{ mm}$

Compare. Write $<$, $>$, or $=$.

10. $900 \text{ cm} \bigcirc 9,000 \text{ mm}$ 11. $600 \text{ km} \bigcirc 5 \text{ m}$ 12. $5,000 \text{ cm} \bigcirc 5 \text{ m}$
13. $18,000 \text{ L} \bigcirc 10 \text{ kL}$ 14. $8,456 \text{ mL} \bigcirc 9 \text{ L}$ 15. $2 \text{ m} \bigcirc 275 \text{ cm}$

Problem Solving

16. Bria ordered 145 centimeters of fabric. Jayleen ordered 1.5 meters of fabric. Who ordered more fabric?
17. Ed fills his sports bottle with 1.2 liters of water. After his bike ride, he drinks 200 milliliters of the water. How much water is left in Ed's sports bottle?

18.  *Math* Explain the relationship between multiplying and dividing by 10, 100, and 1,000 and moving the decimal point to the right or to the left.

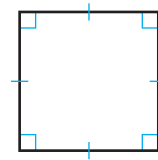
Lesson Check

19. Quan bought 8.6 meters of fabric. How many centimeters of fabric did he buy?
20. Kem takes 2 centiliters of medicine. How many milliliters is this?

Spiral Review

21. Yolanda needs 5 pounds of ground beef to make lasagna for a family reunion. One package of ground beef weighs $2\frac{1}{2}$ pounds. Another package weighs $2\frac{3}{5}$ pounds. How much ground beef will Yolanda have left over after making the lasagna?
22. A soup recipe calls for $2\frac{3}{4}$ quarts of vegetable broth. An open can of broth contains $\frac{1}{2}$ quart of broth. How much more broth do you need to make the soup?

23. What is the volume of a rectangular prism with a length of 6 feet, width of 4 feet, and height of $2\frac{1}{2}$ feet?
24. List all the possible names for the polygon.



Interpret Data Using Mean, Median, Mode, and Range

Go Online

Interactive Examples

Use the table for 1–5.

1. What is the mean of the data?

$$\frac{10 + 8 + 11 + 12 + 6}{5} = \frac{47}{5} = 9.4$$

9.4 points

2. What is the median of the data?

3. What is the mode(s) of the data?

4. What is the range of the data?

Number of Points Blaine Scored in Five Basketball Games	
Game	Points Scored
1	10
2	8
3	11
4	12
5	6

5. Suppose Blaine played a sixth game and scored 10 points during the game. Find the new mean, median, and mode.

Problem Solving

6. An auto manufacturer wants their line of cars to have a median gas mileage of 25 miles per gallon or higher. The gas mileage for their five models are 23, 25, 26, 32, and 19. Do their cars meet their goal? Explain.

7. A sporting goods store is featuring several new bicycles, priced at \$300, \$250, \$325, \$780, and \$350. They advertise that the average price of their bicycles is under \$400. Is their ad correct? Explain.

- 8.
- 
- Math*
- Explain how to find the mean of a set of data.

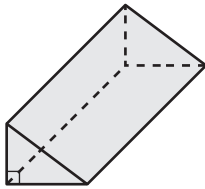
Lesson Check

9. The prices for a video game at 5 different stores are \$39.99, \$44.99, \$29.99, \$35.99, and \$31.99. What is the mode(s) of the data?
10. Manuel is keeping track of how long he practices the saxophone each day. The table gives his practice times for the past five days. What is the mean of his practice times?

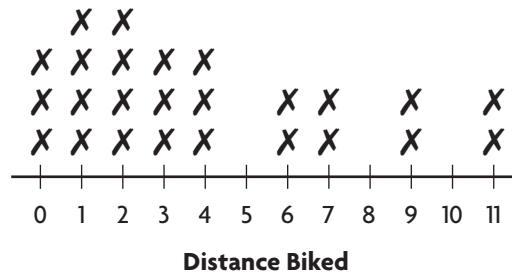
Manuel's Practice Time	
Day	Minutes Practiced
Monday	25
Tuesday	45
Wednesday	30
Thursday	65
Friday	30

Spiral Review

11. Name the figure shown.



12. Fuyo records the number of miles that she bikes each day. She displayed the number of daily miles in the line plot below. How many days did she bike 4–7 miles?



13. Six people eat breakfast together at a restaurant. The costs of their orders are \$4, \$5, \$9, \$8, \$6, and \$10. If they want to split the check evenly, how much should each person pay?

Use Frequency Tables

Go Online

Interactive Examples

Use the frequency table for Problems 1–4.

1. Tira is in charge of cookie sales for her scout troop. How many members sold more than 40 boxes of cookies?

2. How many members sold fewer than 40 boxes of cookies?

3. How many boxes of cookies did the most number of members sell?

Number of Boxes of Cookies Sold	
Boxes	Frequency
25	4
30	6
35	7
40	5
45	2
50	1

4. How many members are represented in Tira's frequency table?

Problem Solving

Use the frequency table for Problems 5–7.

5. The table shows the number of absences in the fourth grade during the school year. How many students were absent either 1 or 2 times during the school year?

6. How many students were absent more than 2 times during the school year?

7. **Multi-Step** How many more students were absent 2 days or less than students who were absent 3 days or more? Explain your answer.

Number of Absences	
Absences	Frequency
0	36
1	10
2	15
3	4
4	2

Represent and Interpret Line Graphs

Go Online

Interactive Examples

Use the table for 1–7.

Hourly Temperature							
Time	10 a.m.	11 a.m.	12 noon	1 p.m.	2 p.m.	3 p.m.	4 p.m.
Temperature (°F)	$8\frac{1}{2}$	$11\frac{1}{4}$	16	$26\frac{3}{4}$	31	$37\frac{3}{4}$	$41\frac{1}{4}$

1. Write the related number pairs for the hourly temperature as ordered pairs.

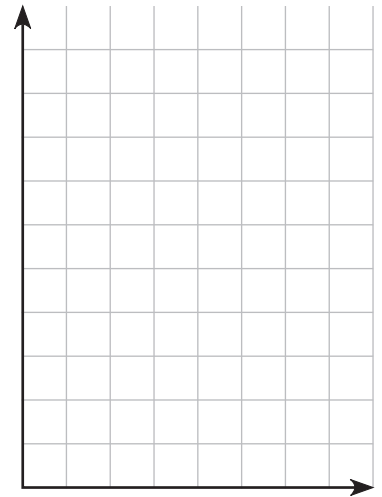
$(10, 8\frac{1}{2}), (11, 11\frac{1}{4}), (12, 16), (1, 26\frac{3}{4}), (2, 31), (3, 37\frac{3}{4}), (4, 41\frac{1}{4})$

2. What scale would be appropriate to graph the data?

3. What interval would be appropriate to graph the data?

4. Make a line graph of the data.

5. Use the graph to find the difference in temperature between 11 a.m. and 1 p.m.

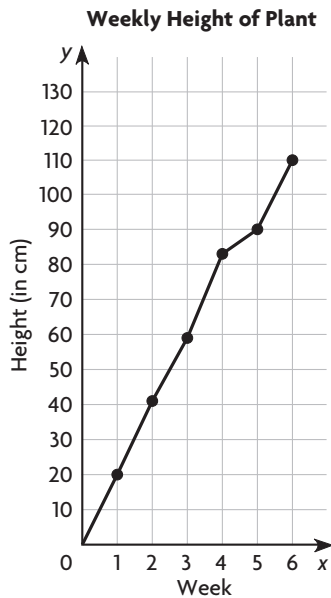


Problem Solving

6. Between which two hours did the least change in temperature occur?

7. What was the change in temperature between 12 noon and 4 p.m.?

Lesson Check



8. About how many centimeters did the plant grow in the first three weeks?

9. Between which two weeks did the plant grow the least?

Spiral Review

10. Write an expression using the Distributive Property to find the product of 7×63 .

11. Seda needs to buy 105 vases for a party. Each package has 6 vases. How many packages should Seda buy?

12. A student athlete runs $3\frac{1}{3}$ miles in 30 minutes. A professional runner can run $1\frac{1}{4}$ times as far in 30 minutes. How far can the professional runner run in 30 minutes?

13. A recipe for salad dressing calls for $\frac{1}{4}$ cup of vinegar. You have 4 cups of vinegar. How many batches of salad dressing could you make with the vinegar?

Use Line Plots

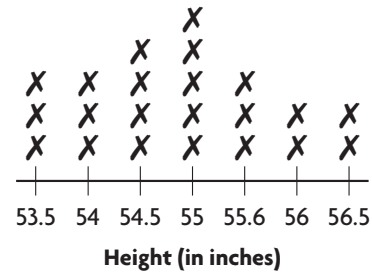
Use the line plot for Problems 1-6.

- Mr. Lennox collected data on the heights of the students in his class. He represents the data he collected in a line plot. How many students are 54.5 inches tall?

- How many students did Mr. Lennox collect data about?

- How many students are more than 55 inches tall?

- What is the range of heights?



- What is the mode of the class heights?

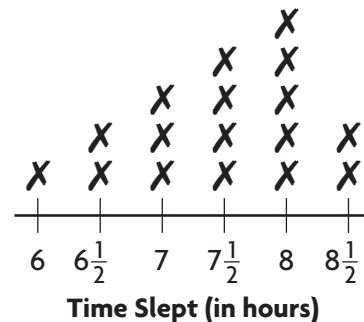
- What is the difference between the number of students who are 55 inches or less tall and the number of students who are more than 55 inches tall?

Problem Solving

Use the line plot for Problems 7-9.

- Tajsa asked several people how many hours they slept each night. He represents the data he collected in a line plot. How many hours of sleep is most common?

- What is the median number of hours slept?



- How many more people sleep 8 or more hours than people who sleep 7 or less hours? Explain.

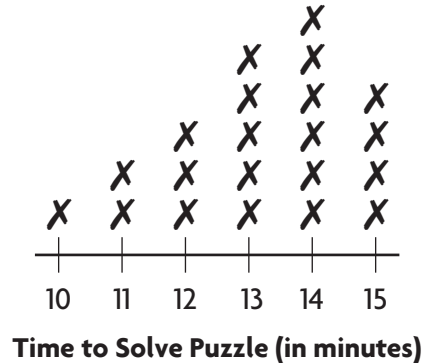
Lesson Check

Fill in the bubble completely to show your answer.

Use the line plot for Problems 10–12.

10. Mrs. Azuela gave her students a puzzle to solve. She made a line plot to show the number of minutes it took her students to solve the puzzle. How many students solved the puzzle in less than 15 minutes?

- (A) 21 (C) 4
(B) 11 (D) 17



11. What is the mode of the times to solve the puzzle?

- (A) 12 minutes (C) 14 minutes
(B) 13 minutes (D) 15 minutes

12. How many more students solved the puzzle in 14 or more minutes than solved the puzzle in 11 or less minutes?

- (A) 10 (C) 8
(B) 7 (D) 3

Spiral Review

13. The number 4,297 is rounded to _____ when rounded to the nearest 100.

14. The number 7,539 is rounded to _____ when rounded to the nearest 1,000.

15. Write the number 562,139 in expanded form.

16. A group of 127 people are lined up to ride the new roller coaster. Only 12 people can fit on the ride at a time. How many times does the ride need to run to allow all the people waiting for it to ride?

Use Stem-and-Leaf Plots

Go Online

Interactive Examples

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

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.

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?

- (A) 9
(B) 21
(C) 23
(D) 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?

- (A) teens (C) thirties
(B) twenties (D) forties

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

- (A) 8 (C) 2
(B) 1 (D) 7

Spiral Review

12. Anita is making a bookmark for her friend Estrella. She cuts the paper to be 3 inches by 7 inches. She realizes the paper is too long, so she cuts off 1 inch from the bottom. What is the area of her bookmark?

13. $0.31 + 0.42 =$ _____

14. Alfred bought 2.9 pounds of peaches and 0.6 pound of blueberries at the farmers' market. What is the total weight of the fruit?
