3rd Grade American Math HW
Chapter 23: Measurement

Dear Family,

During the next few weeks, our math class will be learning about estimating and measuring capacity, liquid volume, weight, mass, and temperature, and using fractions to measure length to the nearest half and quarter inch.
You can expect to see homework on how to use measurement benchmarks and identifying the relationships between units of measurement.

Vocabulary

Capacity: The amount a container will hold.

Celsius: The metric temperature scale.

Fahrenheit: The customary temperature scale.

Liquid volume: The amount of liquid in a container.

Mass: The amount of matter in an object

Weight: The heaviness of an object.

- Homework due date: Sunday, April 27th
- Chapter 18 test: Friday , April 25th (Chapter 18 practice is the first 6 pages of this HW)
- Feel free to contact me with any questions at diana.charaf@archimedean.org

Complete homework daily based on the schedule provided below:

Monday 04/21:	**pages: 867, 868, 869**
Tuesday 04/22:	**pages: 870, 871, 872**
Wednesday 04/23:	**5R3 - YUR** on IXL
Thursday 04/24:	**K8Z - 7FE** on IXL
Friday 04/25:	**LYS - GK8** on IXL

Chapter Review

1. Alexa and Rose read books that have the same number of pages. Alexa's book is divided into 8 equal chapters. Rose's book is divided into 6 equal chapters. Each girl has read 3 chapters of her book.

   Write a fraction to describe what part of the book each girl read. Then tell who read more pages. Explain.

   _____

   _____

   _____

2. David, Maria, and Simone are shading same-sized index cards for a science project. David shaded $\frac{2}{4}$ of his index card, Maria shaded $\frac{2}{8}$ of her index card, and Simone shaded $\frac{2}{6}$ of her index card.

   For Problems 2a–2d, choose Yes or No to indicate whether the comparisons are correct.

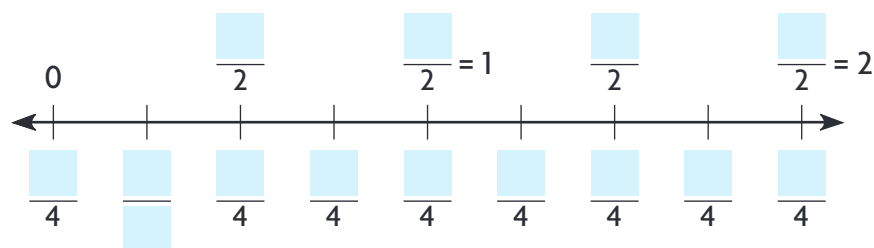   2a. $\frac{2}{4} > \frac{2}{8}$ ○ Yes   ○ No

   2b. $\frac{2}{8} > \frac{2}{6}$ ○ Yes   ○ No

   2c. $\frac{2}{6} < \frac{2}{4}$ ○ Yes   ○ No
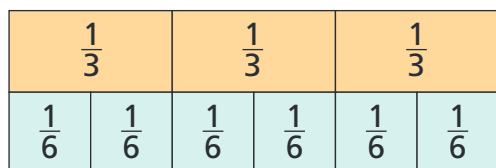
   2d. $\frac{2}{6} = \frac{2}{4}$ ○ Yes   ○ No

3. Dan and Miguel are working on the same homework assignment. Dan has finished $\frac{1}{4}$ of the assignment. Miguel has finished $\frac{3}{4}$ of the assignment. Which statement is correct? Mark all that apply.

   (A) Miguel has completed the entire assignment.

   (B) Dan has not completed the entire assignment.

   (C) Miguel has finished more of the assignment than Dan.

   (D) Dan and Miguel have completed equal parts of the assignment.

4. Complete the number line. Then, compare one fraction above the number line to one fraction below the number line using <, >, or =.

0    $\dfrac{\square}{2}$ $\dfrac{\square}{2}=1$ $\dfrac{\square}{2}$ $\dfrac{\square}{2}=2$

$\dfrac{\square}{4}$ $\dfrac{\square}{\square}$ $\dfrac{\square}{4}$ $\dfrac{\square}{4}$ $\dfrac{\square}{4}$ $\dfrac{\square}{4}$ $\dfrac{\square}{4}$ $\dfrac{\square}{4}$ $\dfrac{\square}{4}$

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5. A nature center offers 2 guided walks. The morning walk is $\frac{2}{3}$ mile. The evening walk is $\frac{2}{6}$ mile. Which walk is shorter? Explain how you can use the model to find the answer.

$\frac{1}{3}$		$\frac{1}{3}$		$\frac{1}{3}$	
$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$

_____

_____

6. Chun lives $\frac{3}{8}$ mile from school. Gail lives $\frac{5}{8}$ mile from school.

Use the fractions and symbols to show which distance is longer.

$\dfrac{3}{8}$ $\dfrac{5}{8}$ $<$ $>$

☐ ◯ ☐

7. Mrs. Reed baked four pans of lasagna for a family party. Use the rectangles to represent the pans.
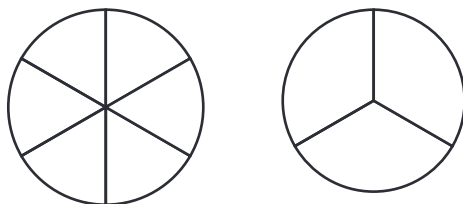

Part A

Draw lines to show how Mrs. Reed could cut one pan of lasagna into thirds, one into fourths, one into sixths, and one into eighths.

Part B

After dinner, two pans had the same amount of lasagna left over. Write a pair of equivalent fractions that could describe how much was left over in the two pans. Then write a different pair of equivalent fractions that could also describe how much was left over in the two pans.

_____

8. Tom rode his horse for $\frac{4}{6}$ mile. Liz rode her horse for $\frac{2}{3}$ mile. Did they ride the same distance? Use the models to show your work.

_____

9. Write the fractions in order from least to greatest: $\frac{6}{2}, \frac{6}{4}, \frac{6}{3}$.

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10. Jenna painted $\frac{1}{8}$ of one side of a fence. Mark painted $\frac{1}{6}$ of the other side of the same fence. Use $>$, $=$, or $<$ to compare the parts that they painted.

_____

11. Bill used $\frac{1}{3}$ cup of raisins and $\frac{2}{3}$ cup of banana chips to make a snack.

For Problems 11a–11d, choose True or False for each comparison.

11a. $\frac{1}{3} > \frac{2}{3}$ ○ True   ○ False

11b. $\frac{2}{3} = \frac{1}{3}$ ○ True   ○ False

11c. $\frac{1}{3} < \frac{2}{3}$ ○ True   ○ False

11d. $\frac{2}{3} > \frac{1}{3}$ ○ True   ○ False

12. Jorge, Lynne, and Crosby meet at the playground. Jorge lives $\frac{5}{6}$ mile from the playground. Lynne lives $\frac{4}{6}$ mile from the playground. Crosby lives $\frac{4}{5}$ mile from the playground.

Part A

Who lives closer to the playground, Jorge or Lynne? Explain how you know.

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_____

Part B

Who lives closer to the playground, Lynne or Crosby? Draw and shade figures, draw and label a number line, or use reasoning to decide. Explain which method you used and why.

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13. Ming needs $\frac{3}{4}$ pint of red paint for an art project. He has 6 jars that have the following amounts of red paint in them. He wants to use only 1 jar of paint. Mark all the jars of paints that Ming could use.

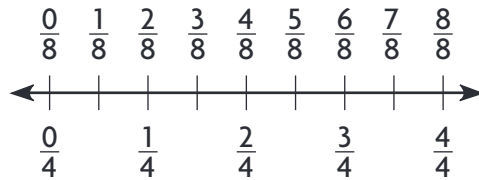Ⓐ $\frac{3}{3}$ pint   Ⓓ $\frac{5}{4}$ pint

Ⓑ $\frac{1}{4}$ pint   Ⓔ $\frac{3}{8}$ pint

Ⓒ $\frac{3}{2}$ pint   Ⓕ $\frac{3}{6}$ pint

14. Use the number line for Part A and Part B.

Part A

$$\frac{0}{8} \quad \frac{1}{8} \quad \frac{2}{8} \quad \frac{3}{8} \quad \frac{4}{8} \quad \frac{5}{8} \quad \frac{6}{8} \quad \frac{7}{8} \quad \frac{8}{8}$$

$$\frac{0}{4} \quad\quad \frac{1}{4} \quad\quad \frac{2}{4} \quad\quad \frac{3}{4} \quad\quad \frac{4}{4}$$

Fill in the *yes* circle if the pair of fractions are equivalent fractions.

$\frac{3}{4}$ and $\frac{5}{8}$ ○ Yes   ○ No

$\frac{4}{4}$ and $\frac{8}{8}$ ○ Yes   ○ No

$\frac{2}{4}$ and $\frac{4}{8}$ ○ Yes   ○ No

Part B

Write these fractions in order from greatest to least: $\frac{6}{8}, \frac{0}{8}, \frac{3}{8}, \frac{5}{8}$

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15. Mavis mixed $\frac{5}{10}$ quart of apple juice with $\frac{1}{2}$ quart of cranberry juice. Compare the fractions. Circle the symbol that makes the statement true.

$$\frac{5}{10} \quad \begin{array}{c} < \\ = \\ > \end{array} \quad \frac{1}{2}$$

16. Pat has three pieces of fabric that measure $\frac{3}{6}, \frac{5}{6}$, and $\frac{2}{6}$ yards long. Write the lengths in order from least to greatest.

_____

17. Cora measures the heights of three plants. Draw a line to match each height on the left to the word on the right that describes its place in the order of heights.

$\frac{4}{6}$ foot   ●   ●   least

$\frac{4}{4}$ foot   ●   ●   between

$\frac{4}{8}$ foot   ●   ●   greatest

18. Danielle drew a model to show equivalent fractions.

Which two of these fractions is equivalent to 1 half: $\frac{1}{4}, \frac{2}{4}, \frac{3}{4}, \frac{4}{8}, \frac{5}{8}, \frac{6}{8}$? Use the model to decide.

$\frac{1}{2} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

19. Floyd caught a fish that weighed $\frac{7}{12}$ pound. Kira caught a fish that weighed $\frac{7}{8}$ pound. Whose fish weighed more? Explain the strategy you used to solve the problem.

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20. Sam went for a ride on a sailboat. The ride lasted $\frac{3}{4}$ hour.

What fraction is equivalent to $\frac{3}{4}$?

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