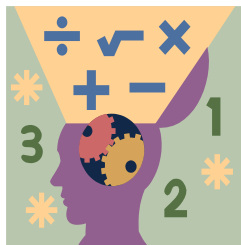


Name: \_\_\_\_\_ Section: \_\_\_\_\_



### Homework

Greetings Scholars and Parents. This week we'll be working on various reviews as prepare for our PM2 FAST for Mathematics. There is no additional homework for Thursday. **Please note: we will be working on these reviews in class!** Although the page number may seem overwhelming, the **number of questions is lower than you may initially notice**, especially considering class time. We will get through this together!

### Extra Practice – OPTIONAL THIS WEEK

Additional practice for the daily lessons is available on IXL. To access extra practice, please have your child login into IXL. Under the **“FROM YOUR TEACHER”** section, scholars will find Teacher Assigned Lessons. From there, you will see a list of lessons reinforcing the daily skills.

- [Equivalent fractions](#)
- [Add and subtract fractions with unlike denominators: word problems](#)
- [Add and subtract mixed numbers with unlike denominators: word problems](#)
- [Multiply two fractions: word problems](#)
- [Multiplication with mixed numbers: word problems](#)
- [Divide unit fractions and whole numbers: word problems](#)

### Notes

**Completed homework packets should be uploaded or turned in on Sunday, December 14<sup>th</sup>**. Students must prove and show all their work in the provide space. Scholars should use a separate sheet of paper if they need additional space. Failure to show work or packets submitted after the due date will result in a lower grade. If a scholar struggles with a lesson, they can review the daily lesson on HMH. Please feel free to contact me with any questions or concerns at [peter.vanegas@archimedean.org](mailto:peter.vanegas@archimedean.org).

|                  |                           |                                   |
|------------------|---------------------------|-----------------------------------|
| <u>Monday</u>    | December 8 <sup>th</sup>  | – Chapter 9 Review                |
| <u>Tuesday</u>   | December 9 <sup>th</sup>  | – Chapter 10 Review               |
| <u>Wednesday</u> | December 10 <sup>th</sup> | - Chapter 11 Review               |
| <u>Thursday</u>  | December 11 <sup>th</sup> | - <b>PM2 FAST MATHEMATICS</b>     |
| <u>Friday</u>    | December 12 <sup>th</sup> | - STEM Day 1 – Research & Design. |

Name \_\_\_\_\_

## Chapter Review

1. Sophia babysat for  $3\frac{7}{12}$  hours on Friday. She babysat for  $2\frac{5}{6}$  hours on Saturday. \_\_\_\_\_ estimate how long Sophia babysat on Friday and Saturday combined. Choose the correct benchmarks and sum.

2. Rodrigo practiced playing the guitar  $15\frac{1}{3}$  hours over the past 3 weeks. He practiced for  $6\frac{1}{4}$  hours during the first week and  $4\frac{2}{3}$  hours during the second week. How much time did Rodrigo spend practicing during the third week? Use the numbers and symbols to write an equation that represents the problem. Then solve the equation. Symbols may be used more than once or not at all.

|                 |                |                |     |     |     |
|-----------------|----------------|----------------|-----|-----|-----|
| $15\frac{1}{3}$ | $6\frac{1}{4}$ | $4\frac{2}{3}$ | $x$ | $=$ | $+$ |
|-----------------|----------------|----------------|-----|-----|-----|

Practice time during third week: \_\_\_\_\_ hours

4. Jackson picked apples for his family. He picked a total of  $6\frac{1}{2}$  pounds. He took  $2\frac{3}{4}$  pounds to his aunt and  $1\frac{5}{8}$  pounds to his mother. How many pounds of apples were left to give to his grandmother? Use the numbers and symbols to write an equation that represents the problem, then solve the equation. Symbols may be used more than once or not at all.

$6\frac{1}{2}$     $2\frac{3}{4}$     $1\frac{5}{8}$     $\times$     $=$     $+$

Weight of apples Jackson gave to his grandmother: \_\_\_\_\_ pounds

5. Write  $4\frac{3}{5}$  and  $3\frac{2}{4}$  using a common denominator.

and

6. Jill brought  $2\frac{1}{3}$  boxes of carrot muffins for a bake sale. Mike brought  $1\frac{3}{4}$  boxes of apple muffins. What is the total number of boxes of muffins Jill and Mike brought to the bake sale?

\_\_\_\_\_ boxes of muffins

Name \_\_\_\_\_

7. Caymen bought  $1\frac{7}{8}$  pounds of ham and  $2\frac{1}{4}$  pounds of turkey to make sandwiches for a picnic. He uses  $2\frac{1}{3}$  pounds of meat on the sandwiches. How many pounds of meat are left?

7a. Write an equation to model the problem. Let  $x$  be the number of pounds of meat that are left.

7b. Work backwards to find  $x$ .

$$x = \boxed{\phantom{00}}$$

7c. Answer the question.

So,  pound of meat is left.

8. For numbers 8a–8c, tell whether the Commutative Property or the Associative Property can be used to show each equation is true without calculating. Choose the correct property of addition.

8a.  $\frac{1}{6} + \left(\frac{7}{8} + \frac{5}{6}\right) = \frac{1}{6} + \left(\frac{5}{6} + \frac{7}{8}\right)$

Associative Property

Commutative Property

8b.  $\left(\frac{7}{10} + \frac{1}{3}\right) + \frac{1}{10} = \left(\frac{1}{3} + \frac{7}{10}\right) + \frac{1}{10}$

Associative Property

Commutative Property

8c.  $\left(6\frac{2}{5} + \frac{4}{9}\right) + 3\frac{2}{9} = 6\frac{2}{5} + \left(\frac{4}{9} + 3\frac{2}{9}\right)$

Associative Property

Commutative Property

9. Joshua uses a rule to write the following sequence of numbers.

$$\frac{1}{6}, \frac{1}{2}, \frac{5}{6}, \blacksquare, 1\frac{1}{2}$$

What rule did Joshua use?

What is the missing number in the sequence?

10. Alexis has a puppy that weighed  $5\frac{3}{5}$  pounds when she got it. The puppy gained  $\frac{2}{10}$  pounds each week for 4 weeks. How much did the puppy weigh at the end of the fourth week?
- \_\_\_\_\_ pounds
11. Mr. Cohen drives  $84\frac{2}{10}$  miles on Tuesday,  $84\frac{6}{10}$  miles on Wednesday, and 85 miles on Thursday.

## Part A

What is the rule for the distance Mr. Cohen drives each day? Show how you can check your answer.

## Part B

If the pattern continues, how many miles will Mr. Cohen drive on Sunday? Explain how you found your answer.

Name \_\_\_\_\_

12. Write a rule for the sequence. Then find the unknown term.

$$3\frac{7}{12}, 3\frac{1}{4}, \underline{\hspace{2cm}}, 2\frac{7}{12}, 2\frac{1}{4}$$

Rule: \_\_\_\_\_

13. Four students spent time volunteering last weekend. The table shows how much time each student spent volunteering.

| Volunteering |                 |
|--------------|-----------------|
| Student      | Time (in hours) |
| Amy          | $4\frac{5}{6}$  |
| Beth         | $6\frac{1}{2}$  |
| Victor       | $5\frac{3}{4}$  |
| Cal          | $5\frac{2}{3}$  |

Match each pair of students with the difference between how much time they spent volunteering.

- Amy and Victor ●  $\frac{3}{4}$  hour
- Cal and Beth ●  $\frac{11}{12}$  hour
- Beth and Victor ●  $\frac{5}{6}$  hour

14. For 14a–14d, tell which expressions require you to rename mixed numbers before you can subtract. Find each difference. Write each expression and the difference as an equation in the correct box.

14a.  $2\frac{1}{3} - 1\frac{3}{4}$

14c.  $5\frac{2}{3} - 2\frac{5}{8}$

14b.  $1\frac{3}{4} - \frac{7}{8}$

14d.  $6\frac{1}{5} - 2\frac{1}{3}$

Requires Renaming

Does Not Require Renaming

15. Mr. Clements painted his barn for  $3\frac{3}{5}$  hours in the morning. He painted the barn for  $5\frac{3}{4}$  hours in the afternoon. For numbers 15a–15c, select True or False for each statement.
- 15a. A common denominator of the mixed numbers is 20.  True  False
- 15b. The amount of time spent painting in the morning can be rewritten as  $3\frac{15}{20}$  hours.  True  False
- 15c. Mr. Clements spent  $2\frac{3}{20}$  hours longer painting in the afternoon than the morning.  True  False
16. Guillermo practiced piano for  $2\frac{2}{3}$  hour during the week and  $1\frac{3}{4}$  hour on the weekend.

## Part B

How much time did Guillermo spend practicing piano in all? Explain how you found your answer.

## Part C

How much more time did he spend practicing during the week than on the weekend? Explain how you found your answer.

Name \_\_\_\_\_

## Chapter Review

2. Diana worked on her science project for  $5\frac{1}{3}$  hours. Gabe worked on his science project  $1\frac{1}{4}$  times as long as Diana. Paula worked on her science project  $\frac{3}{4}$  times as long as Diana. For Problems 2a–2d, select True or False for each statement.

2a. Diana worked longer on her science project than Gabe worked on his science project.

True       False

2b. Paula worked less on her science project than Diana worked on her science project.

True       False

2c. Gabe worked longer on his science project than Paula worked on her science project.

True       False

2d. Gabe worked longer on his science project than Diana and Paula combined.

True       False

3. Luis wants to carpet the rectangular floor of his basement. The basement has an area of 864 square feet. The width of the basement is  $\frac{2}{3}$  its length. What is the length of the basement?

\_\_\_\_\_ feet

4. Katana put  $\frac{2}{3}$  of her music collection on her phone. While on vacation, she listened to  $\frac{3}{5}$  of the music on the player. How much of Katana's music collection did she listen to while on vacation? For Problems 4a–4d, choose the correct values to describe how to solve the problem.

4d. Katana listened to \_\_\_\_\_ of her music collection while on vacation.

$\frac{2}{5}$   
 $\frac{3}{5}$   
 $\frac{3}{10}$

5. Logyn bought balloons. Four-fifths of the balloons are purple, and  $\frac{2}{3}$  of the purple balloons have stars on them. What fraction of the balloons are purple with stars on them? Show your work.
- 

6. Kayla walks  $\frac{17}{5}$  miles each day. Which of the following statements correctly describe how far she walks? Mark all that apply.

- (A) Kayla walks  $\frac{20}{17}$  miles in 4 days.
- (B) Kayla walks a little more than 10 miles in 3 days.
- (C) Kayla walks 34 miles in 10 days.
- (D) Kayla walks less than 6 miles in 6 days.

Name \_\_\_\_\_

7. Write each multiplication expression in the correct box.

$\frac{4}{5} \times 1\frac{1}{8}$

$\frac{1}{3} \times \frac{4}{5}$

$3 \times \frac{4}{5}$

$\frac{4}{5} \times \frac{4}{5}$

$\frac{8}{8} \times \frac{4}{5}$

$\frac{4}{5} \times \frac{2}{2}$

Product is  
equal to  $\frac{4}{5}$ .

Product is  
greater than  $\frac{4}{5}$ .

Product is  
less than  $\frac{4}{5}$ .

8. A postcard has an area of 24 square inches. Two enlargements of the postcard have areas of 54 square inches and 96 square inches. In each postcard, the length is  $1\frac{1}{2}$  times the width. Which of the following could be the dimensions of the postcard or one of the enlargements? Mark all that apply.

- (A) 6 inches by 9 inches      (D) 6 inches by 12 inches  
(B) 10 inches by 15 inches      (E) 4 inches by 6 inches  
(C) 8 inches by 12 inches

9. In a fifth grade class,  $\frac{4}{5}$  of the class has brown hair. Of the brown-haired classmates,  $\frac{3}{4}$  of them have long hair. Of the classmates with long brown hair,  $\frac{1}{3}$  of them have green eyes.

### Part A

What fraction of the class has long brown hair?

\_\_\_\_\_ of the classmates

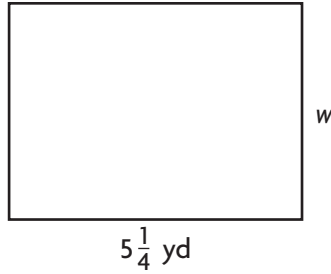
### Part B

What fraction of the class has long brown hair and green eyes?

Explain how you found your answer.

\_\_\_\_\_ of the classmates

10. The length of a rectangle is  $5\frac{1}{4}$  yards. Give a possible width  $w$  for Problems 10a–10c.



10a. For what width will the area of the rectangle be  $5\frac{1}{4}$  square yards?

\_\_\_\_\_

10b. For what width will the area of the rectangle be greater than  $5\frac{1}{4}$  square yards?

\_\_\_\_\_

10c. For what width will the area of the rectangle be less than  $5\frac{1}{4}$  square yards?

\_\_\_\_\_

11. Doreen lives  $\frac{3}{4}$  mile from the library. Sheila lives  $\frac{1}{3}$  as far away from the library as Doreen. For Problems 11a–11c, choose Yes or No to answer each question.

11a. Does Doreen live farther from the library than Sheila?  Yes  No

11b. Does Sheila live  $\frac{1}{4}$  mile from the library?  Yes  No

11c. Does Sheila live twice as far from the library as Doreen?  Yes  No

12. Taniqua took a test where  $\frac{2}{3}$  of the questions were multiple choice. The rest of the questions were true/false. She got  $\frac{9}{10}$  of the multiple choice questions correct.

12a. What fraction of the test questions were multiple choice questions that she got correct?

\_\_\_\_\_

12b. If Taniqua got  $\frac{4}{5}$  of the true/false questions correct, what fraction of the test questions were true/false questions that she got incorrect?

\_\_\_\_\_

Name \_\_\_\_\_

13. The table shows how many hours some of the part-time employees at a toy store worked last week.

| Name     | Hours Worked |
|----------|--------------|
| Conrad   | 6            |
| Giovanni | 9            |
| Sally    | 11           |

This week, Conrad will work  $1\frac{3}{4}$  times as long as last week. Giovanni will work  $1\frac{1}{3}$  times as long as last week. Sally will work  $\frac{2}{3}$  the number of hours she worked last week. Match each employee's name to the number of hours he or she will work this week.

**Employee**

**Hours This Week**

- Conrad ● ● more than last week
- Giovanni ● ● fewer than last week
- Sally ●

14. Annika wants the floor of her chicken coop to be 48 square feet. She wants the length to be  $\frac{4}{3}$  of the width.

- 14a. Estee designs a coop to be 12 feet by 4 feet. Does the design meet all of Annika's conditions? Explain.

---

---

- 14b. What should the dimensions of the coop be?

---

16. Revel is using the recipe below to make chicken noodle soup. She has enough chicken broth for  $\frac{3}{4}$  of a recipe.

**Chicken Noodle Soup**

4 cups chicken broth

2 medium carrots, sliced

3 stalks of celery, sliced

$\frac{1}{2}$  cup uncooked egg noodles

$\frac{1}{8}$  teaspoon ground black pepper

1 cup shredded cooked chicken

**Part A**

Write an expression that Revel can use to determine how many cups of egg noodles she needs.

---

**Part C**

Does Revel need more or less than  $\frac{1}{8}$  teaspoon of black pepper? How do you know?

Name \_\_\_\_\_

## Chapter Review

1. A builder has an 8-acre plot divided into  $\frac{1}{4}$ -acre home sites. How many  $\frac{1}{4}$ -acre home sites are there?

There are  home sites.

2. For numbers 2a–2e, select True or False for each equation.

2a.  $3 \div \frac{1}{4} = \frac{1}{12}$        True       False

2b.  $7 \div \frac{1}{2} = 14$        True       False

2c.  $\frac{1}{5} \div 4 = 20$        True       False

2d.  $\frac{1}{2} \div 5 = \frac{1}{10}$        True       False

2e.  $\frac{1}{7} \div 3 = 21$        True       False

3. Twelve pounds of beans are distributed equally into 8 bags to give out at the food bank. How many pounds of beans are in each bag?

\_\_\_\_\_ pounds

4. Gabriel made 4 small meatloaves. He cut each meatloaf into fourths. How many  $\frac{1}{4}$ -size pieces of meatloaf does Gabriel have? Draw lines in the model to find the answer.



Gabriel has   $\frac{1}{4}$ -size pieces of meatloaf.

5. Five friends share 3 bags of trail mix equally. What fraction of a bag of trail mix does each friend get?

6. Landon and Colin bought  $\frac{1}{2}$  pound of strawberries. They are sharing the strawberries equally. Each person will receive  pound of strawberries.

7. Choose the numbers to create a story problem that represents  $4 \div \frac{1}{3}$ .

Jonah bought   $\frac{1}{3}$  pounds of cheese.

He made grilled cheese sandwiches and used   $\frac{1}{3}$  pound of cheese in each sandwich.

Jonah made \_\_\_\_\_ sandwiches.

8. A giant tortoise can walk about  $\frac{1}{10}$  meter per second on land. A northern red-bellied turtle can walk about  $\frac{1}{2}$  meter per second on land.

### Part A

How long would it take a giant tortoise to travel 5 meters?  
Show your work.

### Part B

How much longer would it take a giant tortoise than a northern red-bellied turtle to travel 10 meters on land? Explain how you found your answer.

Name \_\_\_\_\_

10. Mrs. Green wrote the following problem on the whiteboard:

Mia and Frank shared  $\frac{1}{3}$  pound of cherries equally. What fractional part of a pound did each person receive?

### Part A

Molly wrote the following equation to solve the problem:  $2 \div \frac{1}{3} = n$ . Do you agree with Molly's equation? Support your answer with information from the problem.

11. Divide. Draw a number line to show your work.

$$2 \div \frac{1}{3} = \boxed{\phantom{00}}$$

12. Zoe has 5 cucumbers she grew in her garden. She wants to share them equally among 4 of her neighbors. How many cucumbers will each neighbor receive? Use the numbers on the tiles to complete the number sentence. You may use a number more than once or not at all.

|   |   |   |                        |   |                        |   |                                                     |
|---|---|---|------------------------|---|------------------------|---|-----------------------------------------------------|
| 1 | 2 | 3 | $\boxed{\phantom{00}}$ | ÷ | $\boxed{\phantom{00}}$ | = | $\frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$ |
| 4 | 5 | 6 |                        |   |                        |   |                                                     |

13. Dora buys one package each of 1-pound, 2-pound, and 4-pound packages of ground beef to make hamburgers.

How many  $\frac{1}{4}$ -pound hamburgers can she make? Show your work using words, pictures, or numbers.

14. Adan has  $\frac{1}{2}$  quart of milk. If he pours the same amount of milk into 3 glasses, each glass will contain  $\boxed{\phantom{00}}$  quart of milk.
15. Nine friends share 3 pumpkin pies equally. What fraction of a pumpkin pie does each friend get?  
Each friend will get  $\boxed{\phantom{00}}$  of a pumpkin pie.

Name \_\_\_\_\_

16. Jesse is making a pitcher of fruit smoothies that contains 3 cups of orange juice. His measuring cup only holds  $\frac{1}{4}$  cup. How many times will Jesse need to fill the measuring cup to get the 3 cups of orange juice?

17. Kayleigh has  $\frac{1}{4}$  cup of oil. She pours the same amount into each of 2 oil lamps. Which equation represents the fraction of a cup of oil that is in each oil lamp? Mark all that apply.

(A)  $\frac{1}{2} \div \frac{1}{4} = n$

(B)  $\frac{1}{4} \times \frac{1}{2} = n$

(C)  $2 \div \frac{1}{4} = n$

(D)  $4 \div 2 = n$

(E)  $\frac{1}{4} \div 2 = n$

(F)  $2 \times \frac{1}{4} = n$

19. Your teacher gives you the problem  $6 \div \frac{1}{5}$ .

## Part C

solve your story problem.

Show your work.

20. Seven friends picked 7 quarts of blueberries. Three of the friends will share 4 quarts of blueberries equally and the other 4 friends will share 3 quarts of the blueberries equally. In which group does each friend get a greater amount of blueberries? Explain your reasoning.