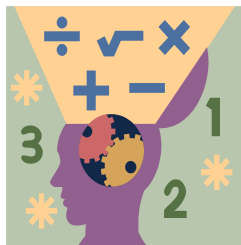


Name: _____ Section: _____



Homework

Greetings, Scholar and Parents! This week, we start **Chapter 10 – Fraction Multiplication**. Fraction multiplication is itself straight-forward, but leads to remarkable results and its effects require deep understanding to succeed on the fast. It is absolutely essential that students have a solid mastery of multiplication to speed along their solving of higher level problems.

Extra Practice

Additional practice for the daily lessons is available on IXL. To access extra practice, please have your child login into IXL and see **“From Your Teacher”** section. These are recommended for reinforcement.

- [Multiply two fractions](#)
- [Multiply fractions by whole numbers II](#)
- [Scaling whole numbers by fractions](#)
- [Scaling fractions by fractions](#)
- [Multiply two fractions: word problems](#)
- [Scaling mixed numbers by fractions](#)

Notes

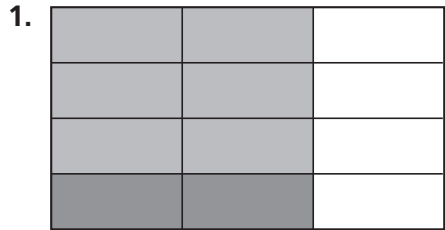
This homework assignment is due on Sunday, October 5th. Students must prove and show all their work in the provide space. Scholars should use a separate sheet of paper if they need additional space. Failure to show work or packets submitted after the due date will result in a lower grade. If a scholar 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.

<u>Monday</u>	October 27 th	10.1
<u>Tuesday</u>	October 28 th	10.2
<u>Wednesday</u>	October 29 th	10.3
<u>Thursday</u>	October 30 th	10.4
<u>Friday</u>	October 31 st	No additional work (Character Day).

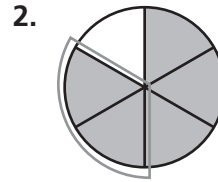
Multiply Fractions

Go Online

Interactive Examples

Find the product.


$$\frac{1}{4} \times \frac{2}{3} = \frac{2}{12}, \text{ or } \frac{1}{6}$$



$$\frac{2}{5} \times \frac{5}{6} = \underline{\hspace{2cm}}$$

Find the product. Draw a model.

3. $\frac{4}{5} \times \frac{1}{2} = \underline{\hspace{2cm}}$

4. $\frac{3}{4} \times \frac{1}{3} = \underline{\hspace{2cm}}$

5. $\frac{3}{8} \times \frac{2}{3} = \underline{\hspace{2cm}}$

6. $\frac{3}{5} \times \frac{3}{5} = \underline{\hspace{2cm}}$

Problem Solving

7. Nora has a piece of ribbon that is $\frac{3}{4}$ yard long. She will use $\frac{1}{2}$ of it to make a bow. What length of the ribbon in yards will she use for the bow?

8. Marlon bought $\frac{7}{8}$ pound of turkey at the deli. He used $\frac{2}{3}$ of it to make sandwiches for lunch. How much turkey in pounds did Marlon use for sandwiches?

Lesson Check

9. Tina has $\frac{3}{5}$ pound of rice. She will use $\frac{2}{3}$ of it to make fried rice for her family. How much rice in pounds will Tina use to make fried rice?
10. The Waterfall Trail is $\frac{3}{4}$ mile long. At $\frac{1}{6}$ of the distance from the trailhead, there is a lookout. In miles, how far is the lookout from the trailhead?

Compare Relative Size of Products to Fraction Factors

Go Online

Interactive Examples

Complete the statement with *equal to*, *greater than*, or *less than*.

1. $\frac{3}{5} \times \frac{4}{7}$ will be _____ **less than** _____ $\frac{4}{7}$.

2. $5 \times \frac{7}{8}$ will be _____ $\frac{7}{8}$.

Think: $\frac{4}{7}$ is multiplied by a number less than 1;

so, $\frac{3}{5} \times \frac{4}{7}$ will be less than $\frac{4}{7}$.

3. $6 \times \frac{2}{5}$ will be _____ $\frac{2}{5}$.

4. $\frac{1}{9} \times 1$ will be _____ $\frac{1}{9}$.


5. $\frac{4}{9} \times \frac{3}{8}$ will be _____ $\frac{3}{8}$.

6. $\frac{4}{5} \times \frac{7}{7}$ will be _____ $\frac{4}{5}$.

Problem Solving

7. Shani is making hot cocoa. She plans to multiply the recipe by 4 to make enough hot cocoa for the whole class. If the recipe calls for $\frac{1}{2}$ teaspoon vanilla extract, will she need more than $\frac{1}{2}$ teaspoon or less than $\frac{1}{2}$ teaspoon of vanilla extract to make all the hot cocoa?
- _____

8. Miles is planning to spend $\frac{2}{3}$ as many hours cycling this week as he did last week. Is Miles going to spend more hours or fewer hours cycling this week than last week?
- _____

9.  Explain how you can compare the size of a product to the size of a factor when multiplying fractions without actually doing the multiplication. Include a model.
- _____

Lesson Check

10. Trevor saves $\frac{2}{3}$ of the money he earns at his after-school job. Suppose Trevor starts saving $\frac{1}{4}$ as much as he is saving now. Will he be saving less, more, or the same amount?
11. Suppose you multiply a whole number greater than 1 by the fraction $\frac{3}{5}$. Will the product be greater than, less than, or equal to $\frac{3}{5}$?

Compare Relative Size of Products with Fraction Multiplication

Go Online

Interactive Examples

Find the product.

1. $\frac{4}{5} \times \frac{7}{8} = \frac{4 \times 7}{5 \times 8}$

2. $3 \times \frac{1}{6}$

3. $\frac{5}{9} \times \frac{3}{4}$

4. $\frac{4}{7} \times \frac{1}{2}$

5. $\frac{1}{8} \times 20$

$\frac{28}{40}$, or $\frac{7}{10}$

6. Ciara raked $\frac{3}{5}$ of the yard. Minni raked $\frac{1}{3}$ of the amount Karen raked. How much of the yard did Minni rake?

7. In the pet show, $\frac{3}{8}$ of the pets are dogs. Of the dogs, $\frac{2}{3}$ have long hair. What fraction of the pets are dogs with long hair?

Algebra Evaluate for the given value of the variable.

8. $\frac{7}{8} \times c$ for $c = 8$

9. $t \times \frac{3}{4}$ for $t = \frac{8}{9}$

10. $\frac{1}{2} \times s$ for $s = \frac{3}{10}$

11. $y \times 6$ for $y = \frac{2}{3}$

Problem Solving

12. Peja ran $\frac{5}{7}$ of the distance around the school track. Sara ran $\frac{4}{5}$ of Peja's distance. What fraction of the total distance around the track did Sara run?

13. A group of students attend a math club. Half of the students are boys and $\frac{4}{9}$ of the boys have brown eyes. What fraction of the group are boys with brown eyes?

Lesson Check

15. Som attended band practice for $\frac{5}{6}$ hour. Then he went home and practiced for $\frac{2}{5}$ as long as band practice. How many minutes did he practice at home?
16. Vailea read $\frac{5}{8}$ of a 56-page book. How many pages did Vailea read?

Compare Relative Size of Products to Mixed Number Factors

Go Online

Interactive Examples

Complete the statement with *equal to*, *greater than*, or *less than*.

1. $\frac{2}{3} \times 1\frac{5}{8}$ will be _____ **less than** _____ $1\frac{5}{8}$.

Think: $1 \times 1\frac{5}{8}$ is $1\frac{5}{8}$.

Since $\frac{2}{3}$ is less than 1,

$\frac{2}{3} \times 1\frac{5}{8}$ will be less than $1\frac{5}{8}$.

2. $\frac{5}{5} \times 2\frac{3}{4}$ will be _____ $2\frac{3}{4}$.

3. $3 \times 3\frac{2}{7}$ will be _____ $3\frac{2}{7}$.

4. $9 \times 1\frac{4}{5}$ will be _____ $1\frac{4}{5}$.

5. $1\frac{7}{8} \times 2\frac{3}{8}$ will be _____ $2\frac{3}{8}$.

6. $3\frac{4}{9} \times \frac{5}{9}$ will be _____ $3\frac{4}{9}$.

Problem Solving

7. Karim is making a scale drawing of a doghouse. The dimensions of the drawing will be $\frac{1}{8}$ of the dimensions of the actual doghouse. The height of the actual doghouse is $36\frac{3}{4}$ inches. Will the dimensions of Karim's drawing be equal to, greater than, or less than the dimensions of the actual doghouse?
- _____

8. Jorge has a recipe that calls for $2\frac{1}{3}$ cups of flour. He plans to make $1\frac{1}{2}$ times the recipe. Will the amount of flour Jorge needs be equal to, greater than, or less than the amount of flour his recipe calls for?
- _____

Lesson Check

10. Jenna skis $2\frac{1}{3}$ miles down the mountain. Her instructor skis $1\frac{1}{2}$ times as far. Does Jenna ski a lesser, greater, or the same distance as her instructor?
11. Suppose you multiply a fraction less than 1 by the mixed number $2\frac{3}{4}$. Will the product be less than, greater than, or equal to $2\frac{3}{4}$?
