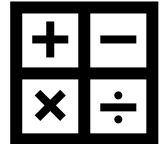


**Math: In-Home Learning April 20<sup>th</sup> - 24<sup>th</sup>**

**Overview of Week:** *This week you will review mixed numbers and improper fractions, multiply fractions with whole numbers, multiply fractions with a fraction, divide fractions with whole numbers, and divide fractions with a fraction. Additionally, there are pages from Bridges that use these same concepts to solve story problems and equations using the array strategy.*

Monday	Tuesday	Wednesday	Thursday	Friday
Mixed Numbers and Improper Fractions	Multiply Fraction with a Fraction	Multiply Fraction with a Whole Number	Divide Fraction with a Fraction	Divide Fraction with a Whole Number

## Monday: Mixed Numbers and Improper Fractions



Watch each video and complete online practice

[Khan Academy video - writing mixed numbers as improper fractions](#)

[Khan Academy video – writing improper fractions as mixed numbers](#)

[Khan Academy online practice – mixed numbers and improper fractions](#)

Complete worksheet on separate sheet of paper showing your work.

See example:



This example shows two ways to solve problem one, from both sections of the worksheet.

You can choose the way you want to solve but you need to show how you did it.

Write neatly enough so another person can read your work.



Examples

Converting Improper Fractions to Mixed Numbers

1.  $\frac{13}{2} = \frac{2}{2} + \frac{2}{2} + \frac{2}{2} + \frac{2}{2} + \frac{2}{2} + \frac{2}{2} + \frac{1}{2}$   
 $1 + 1 + 1 + 1 + 1 + 1 + \frac{1}{2}$   
 6  $\frac{1}{2}$  ← circle your final answer

or

1.  $\frac{13}{2} = 2 \overline{)13} = 6 \frac{1}{2}$  ← circle your final answer

Converting Mixed Numbers to Improper Fractions

1.  $7 \frac{1}{4} = 7 \times \frac{4}{4} + \frac{1}{4} = \frac{28}{4} + \frac{1}{4} = \frac{29}{4}$

or

1.  $7 \frac{1}{4} = 7 \times 4 = 28 \text{ fourths} + 1 \text{ fourth} = \frac{29}{4}$

Name : \_\_\_\_\_ Score : \_\_\_\_\_

Teacher : \_\_\_\_\_ Date : \_\_\_\_\_

## Converting Improper Fractions to Mixed Numbers

1)  $\frac{13}{2} =$  \_\_\_\_\_ 2)  $\frac{15}{2} =$  \_\_\_\_\_ 3)  $\frac{46}{6} =$  \_\_\_\_\_

4)  $\frac{5}{2} =$  \_\_\_\_\_ 5)  $\frac{31}{9} =$  \_\_\_\_\_ 6)  $\frac{19}{5} =$  \_\_\_\_\_

7)  $\frac{13}{3} =$  \_\_\_\_\_ 8)  $\frac{7}{3} =$  \_\_\_\_\_ 9)  $\frac{42}{8} =$  \_\_\_\_\_

10)  $\frac{31}{4} =$  \_\_\_\_\_ 11)  $\frac{17}{3} =$  \_\_\_\_\_ 12)  $\frac{19}{9} =$  \_\_\_\_\_

13)  $\frac{42}{10} =$  \_\_\_\_\_ 14)  $\frac{36}{7} =$  \_\_\_\_\_ 15)  $\frac{24}{7} =$  \_\_\_\_\_

## Converting Mixed Numbers to Improper Fractions

1)  $7\frac{1}{4} =$  \_\_\_\_\_ 2)  $7\frac{3}{5} =$  \_\_\_\_\_ 3)  $4\frac{1}{3} =$  \_\_\_\_\_

4)  $2\frac{7}{8} =$  \_\_\_\_\_ 5)  $8\frac{3}{4} =$  \_\_\_\_\_ 6)  $7\frac{3}{5} =$  \_\_\_\_\_

7)  $9\frac{3}{7} =$  \_\_\_\_\_ 8)  $6\frac{3}{4} =$  \_\_\_\_\_ 9)  $6\frac{4}{5} =$  \_\_\_\_\_

10)  $8\frac{9}{10} =$  \_\_\_\_\_ 11)  $9\frac{3}{4} =$  \_\_\_\_\_ 12)  $6\frac{1}{9} =$  \_\_\_\_\_

13)  $3\frac{1}{8} =$  \_\_\_\_\_ 14)  $6\frac{1}{3} =$  \_\_\_\_\_ 15)  $5\frac{9}{10} =$  \_\_\_\_\_

## Tuesday: Multiply Fraction with a Fraction

### Watch videos

[Kahn Academy video – multiply fraction with a fraction](#)

[Math Antics video – multiply fraction with a fraction](#)

**Complete worksheet on separate sheet of paper showing your work. (unless you can print)**

Name : \_\_\_\_\_ Score : \_\_\_\_\_

Teacher : \_\_\_\_\_ Date : \_\_\_\_\_

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### Multiplying Fractions

1)  $\frac{1}{5} \times \frac{1}{3} =$

2)  $\frac{1}{2} \times \frac{2}{5} =$

3)  $\frac{1}{2} \times \frac{6}{10} =$

4)  $\frac{1}{2} \times \frac{1}{3} =$

5)  $\frac{3}{5} \times \frac{8}{10} =$

6)  $\frac{1}{5} \times \frac{1}{2} =$

7)  $\frac{2}{5} \times \frac{1}{2} =$

8)  $\frac{3}{4} \times \frac{3}{5} =$

9)  $\frac{1}{4} \times \frac{1}{2} =$

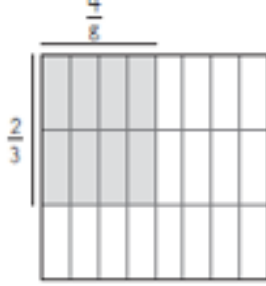



10)  $\frac{2}{4} \times \frac{1}{2} =$

NAME \_\_\_\_\_

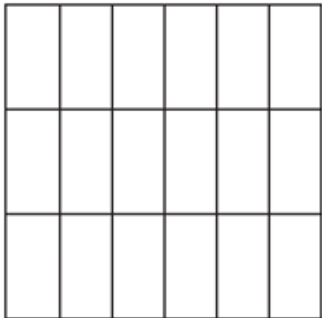
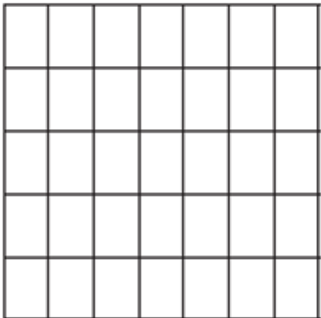
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**Operating with Fractions & Whole Numbers** page 2 of 2**2** Solve each of the multiplication problems below. For each:

- Divide the dimensions of each square so that you can represent each fraction as a dimension of a rectangle.
- Draw and label the dimensions and area, and write the answer.
- Write the problem and answer in words.

<b>ex</b> $\frac{2}{3} \times \frac{4}{8} = \frac{8}{24} = \frac{1}{3}$		Two-thirds of four-eighths is eight twenty-fourths, or $\frac{2}{3}$ .
<b>a</b> $\frac{2}{4} \times \frac{3}{5} =$		
<b>b</b> $\frac{2}{3} \times \frac{4}{6} =$		
<b>c</b> $\frac{3}{4} \times \frac{5}{10} =$		

- 3 Use the grids to model and solve each combination. Be sure to label your sketch and write the answer for each problem.

$\frac{2}{3} \times \frac{4}{6} = \underline{\hspace{2cm}}$  	$\frac{2}{5} \times \frac{5}{7} = \underline{\hspace{2cm}}$  
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- 6 Valerie watched her friend multiply  $\frac{3}{4} \times \frac{5}{6}$ . Her friend got an answer larger than  $\frac{5}{6}$ . Valerie thinks that the answer is not correct. Do you agree? Why or why not?

- 7 The soccer team went to Pizza Palace to celebrate the end of the session. They got several rectangular pizzas for the players to share. Each player got  $(\frac{1}{5}, \frac{1}{4}, \frac{3}{8})$  of one of the pizzas. Sara ate  $(\frac{3}{8}, \frac{2}{3}, \frac{5}{6})$  of her share. How much of a whole pizza did Sara eat?

Expression: \_\_\_\_\_

Sara ate \_\_\_\_\_ of the whole pizza.

**Wednesday: Multiply Fraction with a Whole Number**

Watch video

[Khan Academy video – Multiply fractions with a whole number](#)

Complete worksheet on separate sheet of paper showing your work. (unless you can print)

Name : \_\_\_\_\_ Score : \_\_\_\_\_

Teacher : \_\_\_\_\_ Date : \_\_\_\_\_

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Multiplying Fractions and Whole Numbers

1)  $\frac{5}{7} \times 9 =$

2)  $\frac{2}{6} \times 8 =$

3)  $\frac{3}{5} \times 11 =$

4)  $\frac{4}{8} \times 19 =$

5)  $\frac{1}{2} \times 5 =$

6)  $\frac{1}{8} \times 13 =$

7)  $\frac{3}{6} \times 11 =$

8)  $\frac{1}{4} \times 8 =$

9)  $\frac{6}{7} \times 20 =$

10)  $\frac{3}{6} \times 2 =$

- 4** Solve each multiplication problem, and give the answer as a mixed number. Show all your work.

$$4 \times \frac{5}{8} = \underline{\hspace{2cm}}$$

$$12 \times \frac{2}{3} = \underline{\hspace{2cm}}$$

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

- 5** Write a story problem for one of the combinations in item 4.

- b** Little Snail can crawl ( $\frac{1}{4}$ ,  $\frac{1}{3}$ ,  $\frac{3}{4}$ ,  $\frac{7}{8}$ ) of a mile a day. How far can he crawl in 5 days if he crawls the same distance each day?

Expression: \_\_\_\_\_

Little Snail can crawl \_\_\_\_\_ miles in 5 days.



- c** Keiko always takes her water bottle with her when she hikes, and she always drinks half a liter of water for every mile she hikes. Yesterday, she hiked  $\frac{3}{4}$  a mile. What fraction of a liter of water did she drink?

Expression: \_\_\_\_\_

Keiko drank \_\_\_\_\_ of a liter of water.

- b** Jake and his dad are making flags for a scouting project. They are going to make (6, 12, 18) flags. Each flag takes ( $\frac{2}{3}$ ,  $\frac{3}{4}$ ,  $\frac{5}{6}$ ) of a yard of cloth. How many yards of cloth will they need in all?

Expression: \_\_\_\_\_

Jake and his dad will need \_\_\_\_\_ yards of cloth in all.



- c** It takes ( $4\frac{1}{2}$ ,  $4\frac{3}{4}$ ,  $4\frac{1}{4}$ ) feet of craft lace to make a short lanyard for a keychain. John wants to make a lanyard for each of his (5, 6, 7) aunts and uncles. How many feet of craft lace will he need in all?

Expression: \_\_\_\_\_

John will need \_\_\_\_\_ feet of craft lace.



**Thursday: Divide Fraction with a Fraction**

Watch video

[Math Antics video – divide fraction by a fraction](#)

Complete worksheet on separate sheet of paper showing your work. (unless you can print)

Name : \_\_\_\_\_ Score : \_\_\_\_\_

Teacher : \_\_\_\_\_ Date : \_\_\_\_\_

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Dividing Fractions

1)  $\frac{5}{10} \div \frac{6}{12} =$

2)  $\frac{10}{16} \div \frac{5}{18} =$

3)  $\frac{1}{3} \div \frac{11}{15} =$

4)  $\frac{3}{4} \div \frac{4}{8} =$

5)  $\frac{1}{10} \div \frac{1}{16} =$

6)  $\frac{2}{5} \div \frac{15}{20} =$

7)  $\frac{1}{4} \div \frac{1}{2} =$

8)  $\frac{15}{16} \div \frac{6}{7} =$

9)  $\frac{1}{3} \div \frac{11}{12} =$

10)  $\frac{3}{4} \div \frac{3}{20} =$

**Friday: Divide Fraction with a Whole Number**

Watch video

[Kahn Academy video – divide fraction with a whole number](#)

**Complete worksheet on separate sheet of paper showing your work. (unless you can print)**

Name : \_\_\_\_\_ Score : \_\_\_\_\_

Teacher : \_\_\_\_\_ Date : \_\_\_\_\_

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Dividing Fractions and Whole Numbers

1)  $\frac{1}{2} \div 2 =$

2)  $8 \div \frac{4}{5} =$

3)  $2 \div \frac{3}{5} =$

4)  $8 \div \frac{3}{5} =$

5)  $\frac{1}{2} \div 5 =$

6)  $7 \div \frac{1}{10} =$

7)  $7 \div \frac{2}{3} =$

8)  $\frac{3}{4} \div 9 =$

9)  $\frac{3}{5} \div 3 =$

10)  $\frac{1}{4} \div 9 =$

2 Use multiplication to check your answer for each of the division problems below.

<p><b>ex</b> <math>100 \div 4 = \underline{25}</math> I know this is correct because <math>25 \times 4 = 100</math></p>	<p><b>ex</b> <math>\frac{1}{2} \div 2 = \underline{\frac{1}{4}}</math> I know this is correct because <math>\frac{1}{4} \times 2 = \frac{1}{2}</math></p>
<p><b>a</b> <math>\frac{1}{2} \div 4 = \underline{\hspace{2cm}}</math></p>	<p><b>b</b> <math>\frac{1}{4} \div 2 = \underline{\hspace{2cm}}</math></p>
<p><b>c</b> <math>\frac{1}{3} \div 2 = \underline{\hspace{2cm}}</math></p>	<p><b>d</b> <math>\frac{1}{4} \div 4 = \underline{\hspace{2cm}}</math></p>

8 **CHALLENGE** Maria says that dividing  $\frac{1}{2}$  by 3 is the same as multiplying  $\frac{1}{2}$  by  $\frac{1}{3}$ . Do you agree with her? Why or why not? Use numbers, labeled models, or words to explain your thinking.