Problem Solving

5. Mathematical PRACTICE 5 **Use Math Tools** Demont used 4 gallons of gasoline in three days driving to work. Each day he used the same amount of gasoline. How many gallons of gasoline did he use each day?

6. Suzanne made 2 gallons of punch to be divided equally among 10 people. How much of the punch did each person receive?

Brain Builders

7. The baseball team is selling 30 loaves of banana bread. Each loaf is sliced and equally divided into 12 large storage containers. If each slice is the same size, how many loaves of banana bread are in each container? Between what two whole numbers does the answer lie?

8. Mathematical PRACTICE 2 **Reason** You know that if $15 \div 3 = 5$, then $5 \times 3 = 15$. If you know that $7 \div 8 = \frac{7}{8}$, what can you conclude about the product of $\frac{7}{8}$ and 8? Explain.

9. **Building on the Essential Question** How can division be represented by using a fraction? Give a real-world example.

Name _____

MY Homework

Number and Operations – Fractions
5.NF.3

Lesson 1
Fractions and Division

Homework Helper

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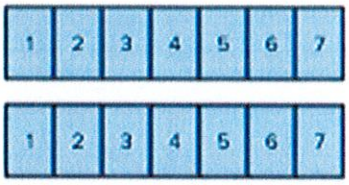
Two truckloads of mulch are used to cover seven playground areas. Each playground receives the same amount of mulch. How much mulch does each playground receive?

Two truckloads are divided to cover seven playgrounds.

$2 \div 7$



Each playground receives $\frac{2}{7}$ of a truckload.

So, $2 \div 7 = \frac{2}{7}$.

This number is between the whole numbers 0 and 1.

Practice

1. Three pounds of potatoes make eight equal-size servings of mashed potatoes. How many pounds of potatoes are in each serving? Represent the situation with a model. Then solve.

Each serving uses $\frac{\square}{\square}$ pound of potatoes.

So, $3 \div 8 = \frac{\square}{\square}$.

The answer is between the whole numbers _____ and _____.

Problem Solving

2. One large submarine sandwich is divided equally among four people. How much of the sandwich did each person receive?

Brain Builders

3. Four gallons of paint are used to paint 20 chairs and 5 small tables. If each chair and table used the same amount of paint, how many gallons are used to paint each piece of furniture? Between what two whole numbers does your answer lie?

4. Mathematical PRACTICE 1 **Make Sense of Problems** Mrs. Larsen made 12 pillows from 16 yards of the same fabric. How much fabric was used to make each pillow? Between what two whole numbers does your answer lie?

How many feet of fabric are needed for each pillow?

Vocabulary Check

5. Fill in each blank with the correct word to complete the sentence.

The numerator is the _____ number in a fraction, while the denominator is the _____ number in a fraction.

6. **Test Practice** Elena drank 5 bottles of water over 7 volleyball practices. How much water did Elena drink each practice if she drank the same amount each time?

Ⓐ $\frac{2}{7}$ bottle Ⓒ $\frac{5}{7}$ bottle

Ⓑ $\frac{2}{5}$ bottle Ⓓ $\frac{7}{5}$ or $1\frac{2}{5}$ bottles

Name

Number and Operations – Fractions

Preparation for 5.NF.2

Lesson 2
Greatest Common Factor

ESSENTIAL QUESTION

How are factors and multiples helpful in solving problems?

Factors shared by two or more numbers are called **common factors**. The greatest of the common factors of two or more numbers is the **greatest common factor (GCF)** of the numbers.

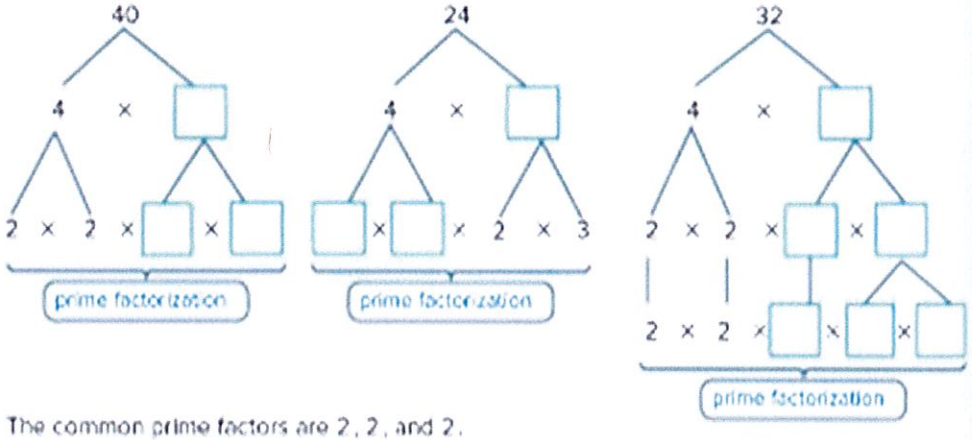
Math in My World

Example 1

Sevierville Middle School arranges their sports trophies in rows in a display case. There is an equal number of trophies in each row. Each row has only one kind of trophy. What is the greatest possible number of trophies in each row?

Trophies	
Type	Number
Volleyball	40
Football	24
Baseball	32

Write the prime factorization to find common factors.



The common prime factors are 2, 2, and 2.

Multiply to find the GCF.

___ × ___ × ___ or ___

So, the greatest number of trophies that could be placed in each row is ___.

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Example 2

Find the GCF of 60 and 54.

Make an organized list of the factors for each number. Then circle the common factors.

60: 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60

54: 1, 2, 3, 6, 9, 18, 27, 54

The common factors are _____, _____, _____, and _____.

So, the greatest common factor, or GCF, of 60 and 54 is _____.

Guided Practice

Find the GCF of each set of numbers.

Talk MATH

Explain which method you prefer to find the GCF of two numbers.

1. 8, 32

8: _____

32: _____

The common factors are _____, _____, _____, and _____.

So, the GCF of 8 and 32 is _____.

2. 3, 12, 18

3: _____

12: _____

18: _____

The common factors are _____ and _____.

So, the GCF of 3, 12, and 18 is _____.

Name _____

Independent Practice

Find the GCF of each set of numbers.

3. 24, 60 _____

4. 12, 18 _____

5. 18, 42 _____

6. 30, 72 _____

7. 4, 10, 14 _____

8. 14, 35, 84 _____

9. 9, 18, 42 _____

10. 16, 52, 76 _____

Name _____

MY Homework

Number and Operations – Fractions

Preparation for 5.NF.2

Lesson 2

Greatest Common Factor

Homework Helper

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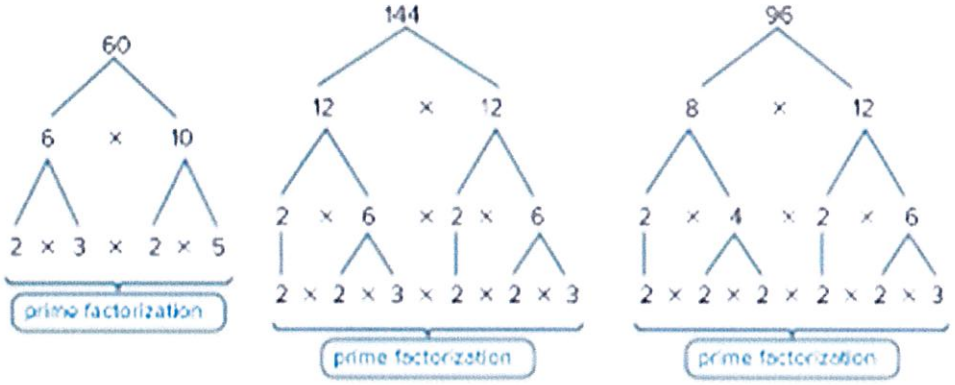
The table shows the amount of money Ms. Ayala made over three days selling 4-inch × 6-inch prints at an arts festival. Each print costs the same amount. What is the most each print could have cost?

Ms. Ayala's Artwork	
Day	Cost ($)
Friday	60
Saturday	144
Sunday	96

Write the prime factorization to find common factors.



The common prime factors are 2, 2, and 3.

Multiply to find the GCF. $2 \times 2 \times 3 = 12$

So, the greatest cost of each print would be $12.

Practice

Find the GCF of each set of numbers.

1. 21, 30 _____

2. 12, 30, 72 _____

Problem Solving

3. A store sells bottles of juice in equal size boxes. Garth bought 18 bottles, Rico bought 36 bottles, and Mai bought 45 bottles. What is the greatest number of bottles in each box? How many boxes did each person buy if each box contained the greatest number of bottles possible?

Brain Builders

4. Mathematical PRACTICE 3 **Justify Conclusions** The GCF of any two even numbers is always even. Determine whether the statement is *true* or *false*. If true, explain why. If false, give a reason.

Vocabulary Check

5. Circle the correct term that makes the sentence true.
The (greatest, least) of the common factors of two or more numbers is the (greatest, least) common factor of the numbers.

6. **Test Practice** Jeremiah will give away all of his sports cards to a number of his friends. What is the greatest number of friends he can give his cards to so that each friend will receive an equal number of baseball cards and football cards?

Sports Cards	
Type	Number
Baseball	32
Football	24

Ⓐ 4 friends Ⓒ 12 friends

Ⓑ 8 friends Ⓓ 16 friends

If you have access to a computer and are working on USATestPrep online, you do NOT have to complete this worksheet.

Name: **Class:**
Teacher: **Date:**

Directions: Compute the sum or difference. Simplify your answer. Show all work.

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1. $\frac{1}{4} + \frac{2}{4}$

_____

2. $\frac{7}{13} - \frac{5}{13}$

_____

3. $\frac{3}{5} + \frac{2}{5}$

_____

4. $\frac{7}{8} - \frac{1}{8}$

_____

5. $\frac{19}{35} + \frac{6}{35}$

_____

6. $\frac{17}{36} - \frac{4}{36}$

_____

7. $\frac{2}{11} + \frac{4}{11}$

_____

8. $\frac{13}{14} - \frac{7}{14}$

_____

9. $\frac{2}{15} + \frac{3}{15}$

_____

10. $\frac{5}{10} - \frac{3}{10}$

_____

11. $\frac{3}{42} + \frac{4}{42}$

_____

12. $\frac{55}{75} - \frac{30}{75}$

_____

USA TEST PREP
Your Classroom Partner

WEEK 10 DAY 1 — Daily Math Practice

1. $3\frac{1}{8} + 2\frac{1}{2} =$ _____

2.
$$\begin{array}{r} 10{,}985 \\ +\ 2{,}785 \\ \hline \end{array}$$

3. Write the percent form of each fraction.

$\frac{1}{2}$ _____ $\frac{7}{10}$ _____

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

4. What is the least common multiple (LCM) of 6 and 10?

_____

5. Draw and label a Venn diagram that shows the intersection of the sets below.

Set A = 2, 4, 6, 8, 10

Set B = 5, 10, 20, 30, 40

WEEK 10 DAY 2 — Daily Math Practice

1. $6\frac{7}{10} - 3\frac{2}{5} =$ _____

2.
$$\begin{array}{r} 495{,}783 \\ -\ 62{,}016 \\ \hline \end{array}$$

3. What is the chance, or probability, of spinning a **3**?

- ○ 1 in 6
- ○ 2 in 3
- ○ 1 in 3

4. Simplify the expression (6 x 2) – 4.

_____

5. What is the average score per game?

Game	Points
1	69
2	48
3	57
4	70
5	66

_____

WEEK 10 DAY 3 — Daily Math Practice

1. $35\frac{1}{2} \times 5 =$ _____

2. $\begin{array}{r} 35.5 \\ \times \quad 5 \\ \hline \end{array}$ $\begin{array}{r} 355 \\ \times \quad 5 \\ \hline \end{array}$

3. If Olivia buys six 12-packs of fruit snacks for $14.40, how much does each fruit snack cost?

   $_____

4. Write the number in standard form.

   one hundred six thousand forty

   _____

5. Complete the table and explain the rule.

Input	Output
2	4
3	9
4	16
5	
6	
7	

_____

_____

_____

_____

WEEK 10 DAY 4 — Daily Math Practice

1. $810 \div 9 =$ _____

2. $64\overline{)1,600}$ $64\overline{)3,200}$ $64\overline{)4,800}$

3. Mark the units that measure length.

   - ○ hectogram
   - ○ kilometer
   - ○ centimeter
   - ○ millimeter
   - ○ deciliter
   - ○ kilogram

4. How many lines of symmetry does the figure have? Draw it.

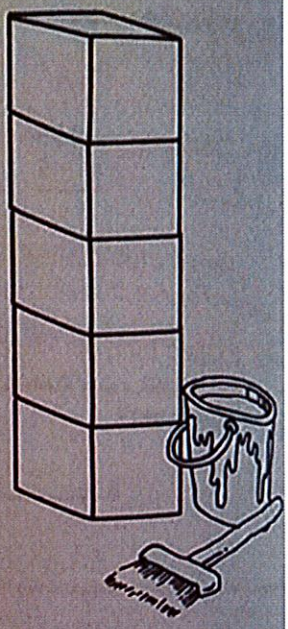
   ○ 0 ○ 2
   ○ 1 ○ 3

5. Elijah is planning a picnic. He will invite twice as many boys as girls. If he invites 18 people, how many boys and how many girls will get invitations?

   boys _____ girls _____

Activity 1

Wyatt is painting boxes that are stacked one on top of the other. He paints only the sides (not the top or bottom) of each box. He will, however, paint the top of the box at the very top of the stack. Complete the function table to show how many faces Wyatt will paint on each stack of boxes.



Number of Boxes	Faces to Paint
3	
5	
8	
11	

What is the rule? _____

Activity 2

Complete the function tables.

Input	Output
2	15
3	25
	55
9	
13	
22	215

What is the rule? _____

Input	Output
12	10
	16
32	
62	35
70	39
86	

What is the rule? _____