

School-Home Letter

Dear Family,

Throughout the next few weeks, our math class will be working with fractions, factors, and multiples. The students will study and learn to add and subtract fractions and mixed numbers.

You can expect to see homework that includes converting improper fractions and mixed numbers.

Here is a sample of how your child will be taught to add fractions with like denominators.

Vocabulary

prime number A number that has exactly two factors: 1 and itself.

prime factorization A number written as a product of factors that are all prime numbers.

Commutative Property of Addition If the order of two addends is changed, the sum is the same.

Associative Property of Addition If the grouping of addends is changed, the sum is the same.

MODEL Add Fractions with Like Denominators

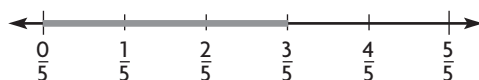
Add $\frac{2}{5} + \frac{1}{5}$

STEP 1

Make a number line showing fifths. Model $\frac{2}{5}$ on the number line by shading the first two fifths.

STEP 2

Add $\frac{1}{5}$ by shading the next fifth. Count the number of equal parts shaded to find the numerator. Record the sum over the denominator.



$$\frac{2}{5} + \frac{1}{5} = \frac{3}{5}$$

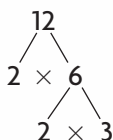
Tips

Sometimes making a quick sketch of the fractions being added will help students remember that the denominator value does not change when fractions are added or subtracted.

Activity

Write the Prime Factorization

To write the prime factorization, start by listing a pair of factors whose product equals the number. If either or both factors are not prime numbers, repeat the process with those factors until a complete list of prime factors has been generated. A prime factor can be used more than once.



Carta para la casa

Querida familia,

Durante las próximas semanas, en la clase de matemáticas trabajaremos con fracciones, factores y múltiplos.

Aprenderemos a sumar y restar fracciones y números mixtos.

Llevaré a la casa tareas con actividades para convertir fracciones impropias y números mixtos.

Este es un ejemplo de la manera como aprenderemos a sumar fracciones con denominadores semejantes.

Vocabulario

número primo Un número que tiene solamente dos factores: 1 y él mismo.

descomposición en factores primos Un número escrito como un producto de factores que son todos números primos.

propiedad conmutativa de la suma Propiedad que afirma que cuando el orden de dos sumandos cambia, la suma es la misma.

propiedad asociativa de la suma Propiedad que afirma que cuando la agrupación de los sumandos cambia, la suma es la misma.

MODELO Sumar fracciones con denominadores semejantes

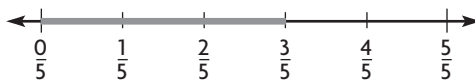
Suma $\frac{2}{5} + \frac{1}{5}$

PASO 1

Haz una recta numérica que muestre quintos. Sombrea los dos primeros quintos para representar $\frac{2}{5}$.

PASO 2

Sombrea el siguiente quinto para sumar $\frac{1}{5}$. Cuenta cuántas partes están sombreadas para hallar el numerador. Escribe la suma sobre el denominador.



$$\frac{2}{5} + \frac{1}{5} = \frac{3}{5}$$

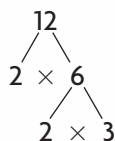
Pistas

Algunas veces hacer un bosquejo rápido de las fracciones que se están sumando ayuda a recordar que el valor del denominador no cambia cuando se suman o se restan fracciones.

Actividad

Escribir la descomposición en factores primos

Para escribir la descomposición en factores primos, primero se escriben los dos factores cuyo producto sea igual al número. Si uno o los dos factores no son números primos, se debe continuar el proceso con esos factores hasta encontrar los factores primos. Un factor primo puede usarse más de una vez.



Name _____

Addition with Like Denominators



MA.5.A.2.1 Represent addition and subtraction of decimals and fractions with like and unlike denominators using models, place value and properties.

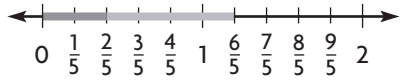
Draw a model to represent the addition problem.

Record the sum.

1. $\frac{2}{5} + \frac{4}{5}$

2. $\frac{7}{8} + \frac{3}{8}$

3. $\frac{2}{9} + \frac{4}{9}$



$\frac{2}{5} + \frac{4}{5} = \frac{6}{5}$, or $1\frac{1}{5}$

4. $\frac{3}{10} + \frac{5}{10}$

5. $\frac{3}{8} + \frac{3}{8}$

6. $\frac{2}{6} + \frac{3}{6}$

7. $\frac{2}{4} + \frac{3}{4}$

8. $\frac{5}{7} + \frac{1}{7}$

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

Problem Solving **REAL WORLD**

10. Brad bought $\frac{1}{3}$ pound of apples and $\frac{2}{3}$ pound of bananas at the store. How many pounds of fruit did he buy?

11. Maria is making a cake and cupcakes for her sister's birthday. The cake calls for $\frac{2}{3}$ pound butter and the cupcakes call for $\frac{4}{3}$ pound butter. How much butter does she need all together?

Lesson Check (MA.5.A.2.1)

- Mary Jane has $\frac{3}{8}$ of a medium pizza left. Hector has $\frac{2}{8}$ of another medium pizza left. How much pizza do they have all together?

(A) $\frac{1}{8}$	(C) $\frac{5}{8}$
(B) $\frac{4}{8}$	(D) $\frac{6}{8}$
- Jeannie ate $\frac{1}{4}$ of an apple. Kelly ate $\frac{2}{4}$ of the apple. How much did they eat together?

(F) $\frac{1}{4}$	(H) $\frac{3}{8}$
(G) $\frac{2}{8}$	(I) $\frac{3}{4}$

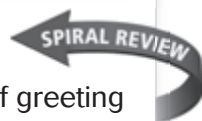
Review Grade 5 (MA.5.A.1.4)



- A dump truck can carry 50 cubic yards of material. How many dump trucks are needed to carry away 6,000 cubic yards of debris?

(A) 120	(F) \$190
(B) 1,200	(G) \$180
(C) 30,000	(H) \$19
(D) 300,000	(I) \$18
- Jefferson earned \$1,520 in a two-week pay period. He worked a total of 80 hours. What is his hourly wage?

Look Back (MA.4.A.6.4, MA.4.A.1.2)



- Which of the following is NOT a factor of 108?

(A) 4	(F) 30
(B) 6	(G) 40
(C) 8	(H) 50
(D) 9	(I) 60
- Karen is making 5 different kinds of greeting cards. She is making 12 of each kind. How many greeting cards is this?

Name _____

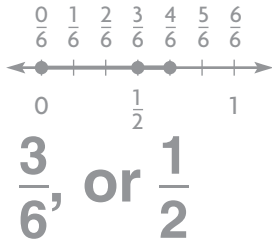
Investigate: Subtraction with Like Denominators



MA.5.A.2.1 Represent addition and subtraction of decimals and fractions with like and unlike denominators using models, place value and properties.

Draw a model to represent the subtraction problem. Record the difference.

1. $\frac{4}{6} - \frac{1}{6}$



2. $\frac{3}{5} - \frac{1}{5}$

3. $\frac{4}{12} - \frac{1}{12}$

4. $\frac{9}{10} - \frac{4}{10}$

5. $\frac{4}{6} - \frac{2}{6}$

6. $\frac{6}{7} - \frac{2}{7}$

7. $\frac{3}{4} - \frac{1}{4}$

8. $\frac{6}{11} - \frac{5}{11}$

9. $\frac{7}{8} - \frac{2}{8}$

Problem Solving



10. Jackson bought $\frac{4}{8}$ cubic yard of soil for his garden. He used part of it and has $\frac{3}{8}$ cubic yard left. How much did he use?

11. Three-fifths of the student population are athletes. Two-fifths of the student population are female athletes. What fraction of the student population are male athletes?

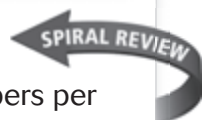
Lesson Check (MA.5.A.2.1)

- Clark saved $\frac{7}{8}$ of a submarine sandwich. His brother ate $\frac{2}{8}$ of the sandwich. How much sandwich is left?

(A) $\frac{1}{8}$	(C) $\frac{5}{8}$
(B) $\frac{4}{8}$	(D) $\frac{6}{8}$
- Gregor has a piece of board that is $\frac{7}{12}$ yard long. He cuts off a piece that is $\frac{2}{12}$ yard long. What is the length of the remaining piece of board?

(F) $\frac{5}{24}$ yard	(H) $\frac{5}{12}$ yard
(G) $\frac{9}{24}$ yard	(I) $\frac{9}{12}$ yard

Review Grade 5 (MA.5.A.1.4)

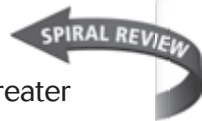


- A printer toner cartridge will print about 400 pages before it needs to be replaced. If the office manager prints about 24,000 pages per year, how many times will she have to replace the toner cartridge per year?

(A) 60	(C) 6,000
(B) 600	(D) 60,000
- A printing press prints 25 newspapers per minute. How long will it take to print 50,000 newspapers?

(F) 20,000 minutes	(H) 200 minutes
(G) 2,000 minutes	(I) 20 minutes

Look Back (MA.5.A.2.2, MA.4.A.2.4)



- Lance cut lasagna in a square pan into 9 pieces. He ate 2 pieces. His mother ate 3 pieces. What fraction represents the amount of lasagna left?

(A) $\frac{2}{9}$	(G) $\frac{4}{8}$
(B) $\frac{3}{9}$	(H) $\frac{4}{9}$
(C) $\frac{4}{9}$	(I) $\frac{3}{7}$
(D) $\frac{5}{9}$	
- Which of the following fractions is greater than $\frac{1}{2}$?

(F) $\frac{7}{12}$	(G) $\frac{4}{8}$
(H) $\frac{4}{9}$	(I) $\frac{3}{7}$

Name _____

Divisibility Rules

MA.5.A.2.4 Determine the prime factorization of numbers.

Tell whether the number is divisible by 2, 3, 4, 5, 6, 9, or 10.

1. 634

2. 275

3. 390

2

4. 468

5. 593

6. 612

7. 235

8. 450

9. 98

Write a 4-digit number that fits the description.

10. A number divisible by 3 and 4 but not 9

11. A number divisible by 3 and 5 but not 4

12. A number divisible by 5 and 6 but not 4

Problem Solving

REAL WORLD

13. Bryson buys a bag of 100 plastic miniature dinosaurs. Could he distribute them equally into six storage containers? Explain.

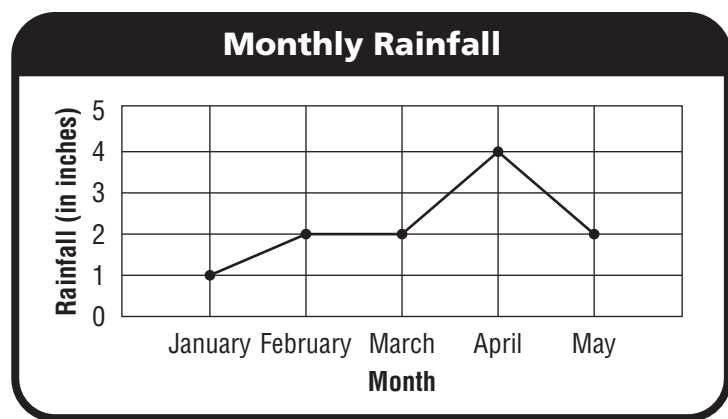
14. The Hanson family picks 378 peaches at their orchard. Could they distribute them equally into containers of 9? Explain.

Lesson Check (MA.5.A.2.4)

- Which of the following numbers is divisible by 9?
 - (A) 347
 - (B) 345
 - (C) 343
 - (D) 342
- Which of the following numbers is NOT divisible by 5?
 - (F) 145
 - (G) 248
 - (H) 265
 - (I) 280

Review Grade 5 (MA.5.S.7.1)

- Which month had an increase of 2 inches of rainfall from the previous month?
 - (A) February
 - (B) March
 - (C) April
 - (D) May



Look Back (MA.4.A.6.3)

- Twelve members of the orchestra are men. There are 40 people in the orchestra. What fraction represents the men in the orchestra?
 - (F) $\frac{12}{40}$
 - (G) $\frac{12}{28}$
 - (H) $\frac{28}{52}$
 - (I) $\frac{28}{40}$
- Devon ate 12 cherries. There were 24 cherries in the bowl. What fraction of the cherries did Devon eat?
 - (A) $\frac{1}{6}$
 - (B) $\frac{1}{4}$
 - (C) $\frac{1}{2}$
 - (D) $\frac{2}{3}$



Name _____

Prime and Composite Numbers

MA.5.A.6.1. Identify and relate prime numbers and composite numbers, factors and multiples within the context of fractions.

Tell whether the number is prime or composite.

1. 379

2. 417

3. 618

prime

4. 219

5. 711

6. 137

7. 133

8. 127

9. 111

Use divisibility rules to find at least four factors of the number.

10. 312

11. 288

12. 780

Problem Solving

13. Could 415 pounds of butter be divided evenly into containers that hold 5 pounds each? Explain.

14. Could 129 eggs be evenly distributed into egg cartons holding 6 eggs each? Explain.

Lesson Check (MA.5.A.6.1)

- The number 5 is:
 - prime
 - composite
 - both prime and composite
 - neither prime nor composite
- The number 1 is:
 - prime
 - composite
 - both prime and composite
 - neither prime nor composite

Review Grade 5 (MA.5.S.7.1)

- Which increment is most appropriate to use when graphing the data in the table?
 - 1
 - 5
 - 10
 - 20

Favorite Mammal		
Mammal	Number of Votes	
	Boys	Girls
Cat	25	35
Dog	45	25
Horse	10	21
Rabbit	15	14

← SPIRAL REVIEW

Look Back (MA.4.A.4.3)

- Leon had some tablecloths, t . Then he bought 10 more tablecloths. Which expression can be used to represent the number of tablecloths Leon has now?
 - $t + 10$
 - $t - 10$
 - $t \times 10$
 - $t \div 10$
- Christy bought some pasta salad that cost \$3 per pound. If p represents the number of pounds she bought, which expression could be used to find how much Christy spent on pasta salad?
 - $p \times \$3$
 - $p \div \$3$
 - $p - \$3$
 - $p + \$3$

← SPIRAL REVIEW

Name _____

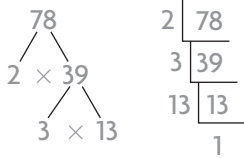
Prime Factorization



MA.5.A.2.4 Determine the prime factorization of numbers.

Find the prime factorization. Use a factor tree or a ladder diagram.

1. 78



$$\underline{2 \times 3 \times 13}$$

2. 60

3. 45

4. 204

5. 24

6. 88

7. 108

8. 90

9. 75

Problem Solving

10. Natalia created a password that is the prime factorization of her street number, 210. The password lists the numbers from least to greatest. What is Natalia's password?

11. The passcode 233357 is made from the prime factorization of what number?

Lesson Check (MA.5.A.2.4)

- Which shows the prime factorization of 72?
 - 2×3
 - $2 \times 2 \times 3 \times 3$
 - $2 \times 2 \times 2 \times 3$
 - $2 \times 2 \times 2 \times 3 \times 3$
- Which shows the prime factorization of 270?
 - $2 \times 3 \times 5$
 - $2 \times 3 \times 5 \times 5$
 - $2 \times 2 \times 2 \times 3 \times 5$
 - $2 \times 3 \times 3 \times 3 \times 5$

Review Grade 5 (MA.5.A.4.1)

- Harriet and Jim washed the same total number of cars at the weekend fundraiser. Harriet washed 6 cars on Saturday and 8 cars on Sunday. Jim washed 9 cars on Saturday. Which equation can be used to find the w , the number of cars Jim washed on Sunday?
 - $6 + 8 = 9 + w$
 - $6 \times 8 = 9 \times w$
 - $8 - 6 = 9 - w$
 - $6 + 8 + 9 = w$
- Javier purchased two identical birthday gifts for two of his friends. The tax was \$3, and the total amount he spent was \$45. Which equation can be used to find g , the cost of one gift?
 - $45 + 3 = 2g$
 - $2g - 3 = 45$
 - $2g + 3 = 45$
 - $45 + 2g = 3$



Look Back (MA.4.A.6.4, MA.5.A.1.4)

- Which of the following is NOT a multiple of 12?
 - 60
 - 90
 - 120
 - 240
- Francis won \$500 at a raffle. If she decides to share it among the 5 people in her family, how much will each person receive?
 - \$2,500
 - \$1,000
 - \$250
 - \$100



Name _____

Greatest Common Factor

MA.5.A.6.1 Identify and relate prime numbers and composite numbers, factors and multiples within the context of fractions.

List the common factors for each pair of numbers.
Circle the greatest common factor.

1. 25 and 10

2. 36 and 90

3. 45 and 60

1, 5

Name the GCF of the numerator and the denominator.

Then write each fraction in simplest form.

4. $\frac{2}{8}$

5. $\frac{6}{15}$

6. $\frac{12}{18}$

7. $\frac{6}{48}$

8. $\frac{20}{50}$

9. $\frac{16}{100}$

10. $\frac{20}{35}$

11. $\frac{19}{27}$

12. $\frac{14}{42}$

Problem Solving

13. What fraction of the names of the months in the year end in the letter R?

14. There are 18 family members in Liam's extended family. He and his two cousins are the only members under 20 years old. What fraction of the family is under 20 years old?

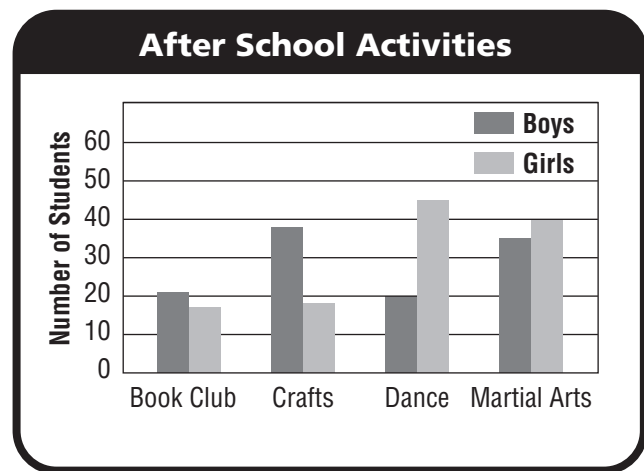
Lesson Check (MA.5.A.6.1)

1. What is the greatest common factor of 128 and 96?
(A) 12
(B) 16
(C) 32
(D) 48
2. What is $\frac{4}{12}$ written in simplest form?
(F) $\frac{1}{4}$
(G) $\frac{1}{3}$
(H) $\frac{2}{3}$
(I) $\frac{3}{4}$

Review Grade 5 (MA.5.S.7.1)

3. The graph shows the number of boys and girls who signed up for each after-school activity. About how many more boys signed up for martial arts than dance?

- (A) 5
(B) 10
(C) 15
(D) 20



Look Back (MA.4.A.6.4)

4. What are all the factors of 52?
(F) 1, 2, 4, 26, 52
(G) 1, 2, 26, 28, 52
(H) 1, 2, 4, 13, 26, 52
(I) 1, 2, 6, 7, 26, 52
5. What are all the factors of 63?
(A) 1, 3, 4, 8, 21, 63
(B) 1, 3, 7, 9, 21, 63
(C) 1, 7, 9, 63
(D) 1, 2, 3, 9, 21

← SPIRAL REVIEW

Name _____

Make a List · GCF



MA.5.A.6.1 Identify and relate prime and composite numbers, factors and multiples within the context of fractions.

Solve each problem.

Find the greatest common factor of 24, 16, and 40.

1. Grace is preparing grab bags for her store’s open house. She has 24 candles, 16 pens, and 40 figurines. If she wants to have the same number of each item in all the bags, what is the greatest number of any item that she can have in one bag?

2. Simon is making wreaths to sell. He has 60 bows, 36 silk roses, and 48 silk carnations. If he wants to put the same number of each item on each wreath, what is the greatest number of items he can put on one wreath?

3. Justin has 20 pencils, 25 erasers, and 40 paperclips. If he organizes them into groups with the same number of each item in each group, what is the greatest number of items he can have in one group?

4. A food bank has 50 cans of vegetables, 30 loaves of bread, and 100 bottles of water. If they organize the items into boxes with the same number of food items in each box, what is the greatest number of items they can have in one box?

5. A youth soccer league has participants from three different schools: 15 from James Elementary, 18 from George Washington School, and 12 from the MLK, Jr. Academy. All teams must have the same number of students and each team can only be made from students from the same school. What is the greatest number of students that can be on each team? How many teams will there be in all?

6. Barbara is creating gift baskets for presents. She has 28 bananas, 35 apples, and 42 oranges. What is the greatest number of identical baskets she can make if she wants the same number of each type of fruit in each basket? How many pieces of each fruit will be in each basket?

Lesson Check (MA.5.A.6.1)

- What is the greatest common factor of 24, 64, and 88?
 - (A) 4
 - (B) 8
 - (C) 12
 - (D) 44
- What is the greatest common factor of 90, 95, and 150?
 - (F) 3
 - (G) 5
 - (H) 10
 - (I) 15

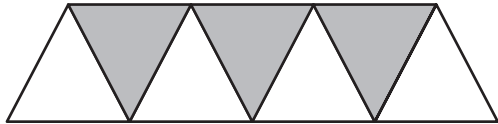
Review Grade 5 (MA.5.A.4.2)

- A snack company produces 8,000 granola bars per day. Each granola bar is 4 ounces. Which equation can be used to find g , the number of ounces of granola bars produced each day?
 - (A) $8,000 + 4 = g$
 - (B) $8,000 - g = 4$
 - (C) $8,000 \div g = 4$
 - (D) $8,000 \times 4 = g$
- Mr. Jordan and his two sons paid \$22 for tickets to a concert. An adult's ticket costs \$4 more than a child's ticket. Which equation can be used to find c , the cost of a child's ticket?
 - (F) $3c + 4 = 22$
 - (G) $4 + 3 + c = 22$
 - (H) $22 + 4 = 3c$
 - (I) $c + (4 \times 3) = 22$

← SPIRAL REVIEW

Look Back (MA.4.A.1.2, MA.4.A.2.3)

- Which fraction represents the shaded area of the figure below?



 - (A) $\frac{2}{7}$
 - (B) $\frac{1}{3}$
 - (C) $\frac{2}{5}$
 - (D) $\frac{3}{7}$
- Dan puts \$5 of his allowance in his savings account every week. How much money will he have after 15 weeks?
 - (F) \$75
 - (G) \$65
 - (H) \$20
 - (I) \$10

← SPIRAL REVIEW

Name _____

Rename Fractions and Mixed Numbers



MA.5.A.2.1. Represent addition and subtraction of fractions with like and unlike denominators using models, place value or properties.

Write each mixed number as a fraction.

1. $2\frac{3}{5}$

$2\frac{3}{5}; 5 \times 2 + 3 = 13$
 $\frac{13}{5}$

2. $4\frac{1}{3}$

3. $1\frac{2}{5}$

4. $3\frac{2}{3}$

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

6. $1\frac{7}{10}$

7. $5\frac{1}{2}$

8. $2\frac{3}{8}$

Write each fraction as a mixed number.

9. $\frac{31}{6}$

10. $\frac{20}{7}$

11. $\frac{15}{8}$

12. $\frac{13}{6}$

13. $\frac{23}{10}$

14. $\frac{19}{5}$

15. $\frac{11}{3}$

16. $\frac{9}{2}$

Problem Solving

17. A recipe calls for $2\frac{2}{4}$ cups of raisins, but Julie only has a $\frac{1}{4}$ -cup measuring cup. How many $\frac{1}{4}$ cups does Julie need to measure out $2\frac{2}{4}$ cups of raisins?

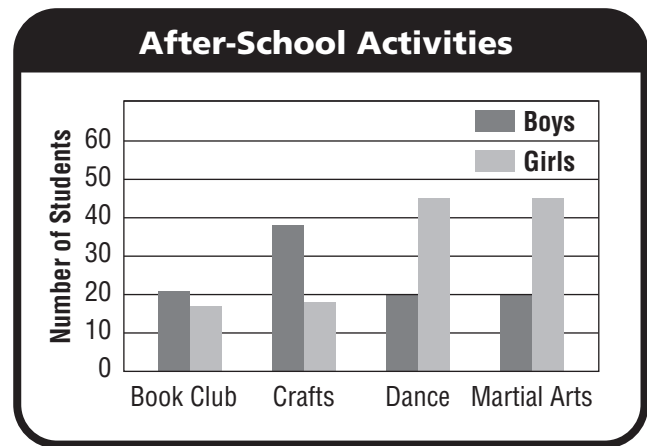
18. If Julie needs $3\frac{1}{4}$ cups of oatmeal, how many $\frac{1}{4}$ cups of oatmeal will she use?

Lesson Check (MA.5.A.2.1)

- Which of the following is equivalent to $\frac{16}{3}$?
 - (A) $3\frac{1}{5}$
 - (B) $3\frac{2}{5}$
 - (C) $5\frac{1}{3}$
 - (D) $5\frac{6}{3}$
- Stacey filled her $\frac{1}{2}$ -cup measuring cup seven times to have enough flour for a cake recipe. How much flour does the cake recipe call for?
 - (F) 3 cups
 - (G) $3\frac{1}{2}$ cups
 - (H) 4 cups
 - (I) $4\frac{1}{2}$ cups

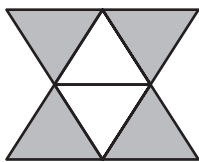
Review Grade 5 (MA.5.S.7.1)

- Which statement about the graph is true?
 - (A) More boys than girls signed up for the activities.
 - (B) More girls than boys signed up for the activities.
 - (C) More girls than boys signed up for book club and crafts.
 - (D) More boys signed up for martial arts than girls signed up for dance.



Look Back (MA.4.A.1.2, MA.4.A.2.3)

- All the triangles are congruent in the figure below. What fraction represents the shaded area of the triangles?



- (F) $\frac{1}{3}$
- (G) $\frac{3}{7}$
- (H) $\frac{1}{2}$
- (I) $\frac{2}{3}$

- Becki glued some postcards from her family vacation into her scrapbook. She glued 3 cards on each page. If she completely filled 16 pages, how many postcards did she have?

- (A) 48
- (B) 38
- (C) 19
- (D) 13

Name _____

Add and Subtract Fractions



MA.5.A.2.2 Add and subtract fractions and decimals fluently and verify the reasonableness of results, including in problem situations.

Find the sum. Write it in simplest form.

$$1. \frac{3}{5} + \frac{4}{5} = \frac{7}{5}$$

$$1\frac{2}{5}$$

$$2. \frac{3}{8} + \frac{6}{8}$$

$$3. \frac{7}{10} + \frac{8}{10}$$

$$4. \frac{7}{6} + \frac{4}{6}$$

$$5. \frac{7}{9} + \frac{5}{9}$$

$$6. \frac{3}{5} + \frac{7}{5}$$

$$7. \frac{1}{6} + \frac{9}{6}$$

$$8. \frac{8}{11} + \frac{6}{11}$$

Find the difference. Write it in simplest form.

$$9. \frac{7}{8} - \frac{3}{8} = \frac{4}{8}$$

$$\frac{1}{2}$$

$$10. \frac{4}{9} - \frac{1}{9}$$

$$11. \frac{7}{10} - \frac{1}{10}$$

$$12. \frac{7}{8} - \frac{1}{8}$$

$$13. \frac{5}{6} - \frac{3}{6}$$

$$14. \frac{7}{12} - \frac{3}{12}$$

$$15. \frac{9}{15} - \frac{3}{15}$$

$$16. \frac{17}{20} - \frac{3}{20}$$

Problem Solving REAL WORLD

17. At Oscar's school, $\frac{3}{10}$ of the fifth-grade students bring their lunch and $\frac{7}{10}$ buy their lunch in the cafeteria. By what fraction do more students buy lunch than bring lunch?

18. Alejandro bought $\frac{7}{8}$ pound of salad at the salad bar and $\frac{3}{8}$ pound of pasta. How many pounds of food did he buy all together?



Lesson Check (MA.5.A.2.2)

1. Callie has two lengths of boards. One is $\frac{3}{4}$ yard long and the other is $\frac{2}{4}$ yard long. What is the total length of board?
- (A) $1\frac{1}{4}$ yards (C) $\frac{5}{8}$ yard
(B) $1\frac{1}{8}$ yards (D) $\frac{1}{8}$ yard
2. A recipe calls for $\frac{1}{2}$ teaspoon table salt and $\frac{1}{2}$ teaspoon sea salt. How much total salt is in the recipe?
- (F) 1 teaspoon (H) $\frac{1}{2}$ teaspoon
(G) $\frac{2}{3}$ teaspoon (I) $\frac{1}{4}$ teaspoon

Review Grade 5 (MA.5.A.4.1)

3. Barron and Dawn read the same total number of books this month. Barron read 8 fiction books and 5 nonfiction books. Dawn read 10 nonfiction books. Which equation can be used to find f , the number of fiction books Dawn read?
- (A) $8 - 5 = 10 - f$
(B) $8 \times 5 = 10 \times f$
(C) $8 + 5 = f + 10$
(D) $8 + 5 + 10 = f$
4. Antonio has 87 CDs. He fills 3 boxes with an equal number of CDs in each case. Which equation can be used to find c , the number of CDs in each box?
- (F) $87 + 3 = c$
(G) $87 - c = 3$
(H) $87 \div 3 = c$
(I) $87 \times 3 = c$

Look Back (MA.5.A.1.4)

5. Dayton is reading a novel. There are 367 pages in the novel. She is on page 169. If she plans to read the same number of pages in each of the next two days, how many more pages does she need to read each day?
- (A) 198
(B) 99
(C) 94
(D) 91
6. Giselle is packing 300 posters to ship to an art museum. She has 15 mailing tubes. How many posters should be in each tube if she wants the same number in each tube?
- (F) 40
(G) 30
(H) 20
(I) 10

Name _____

Add and Subtract Mixed Numbers



MA.5.A.2.2 Add and subtract fractions and decimals fluently and verify the reasonableness of results, including in problem situations.

Find the sum. Write your answer in simplest form.

$$\begin{array}{r} 1. \quad 6\frac{4}{5} \\ + 3\frac{3}{5} \\ \hline \end{array}$$

$$\begin{array}{r} 9\frac{7}{5} \\ 10\frac{2}{5} \end{array}$$

$$\begin{array}{r} 2. \quad 4\frac{1}{2} \\ + 2\frac{1}{2} \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 2\frac{2}{3} \\ + 3\frac{2}{3} \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 6\frac{4}{5} \\ + 7\frac{4}{5} \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 9\frac{3}{6} \\ + 2\frac{2}{6} \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 8\frac{4}{7} \\ + 3\frac{6}{7} \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 4\frac{3}{8} \\ + 1\frac{5}{8} \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 9\frac{5}{10} \\ + 6\frac{3}{10} \\ \hline \end{array}$$

Find the difference. Write your answer in simplest form.

$$\begin{array}{r} 9. \quad 6\frac{7}{8} \\ - 4\frac{3}{8} \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 4\frac{2}{3} \\ - 3\frac{1}{3} \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 6\frac{4}{5} \\ - 3\frac{3}{5} \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 7\frac{3}{4} \\ - 2\frac{1}{4} \\ \hline \end{array}$$

Problem Solving REAL WORLD

13. James wants to send two gifts by mail. One package weighs $2\frac{3}{4}$ pounds. The other package weighs $1\frac{3}{4}$ pounds. What is the total weight of the packages?

14. Tierra bought $4\frac{3}{8}$ yards blue ribbon and $2\frac{1}{8}$ yards yellow ribbon for a craft project. How much more blue ribbon than yellow ribbon did Tierra buy?

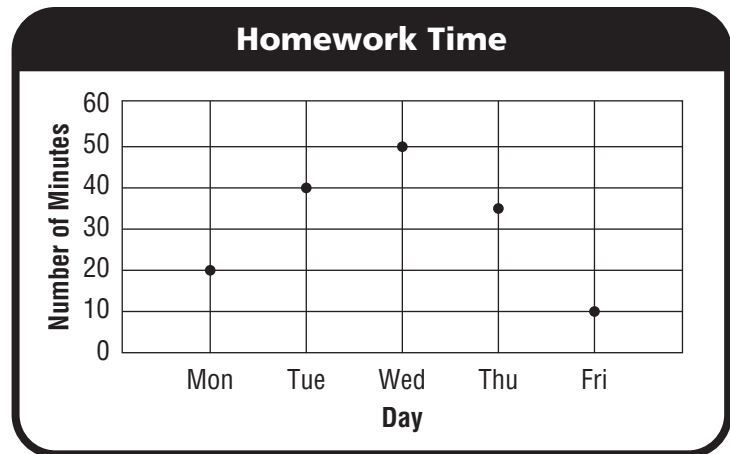
Lesson Check (MA.5.A.2.2)

- Brad has two lengths of copper pipe to fit together. One has a length of $2\frac{5}{12}$ feet and the other has a length of $3\frac{7}{12}$ feet. How many total feet of pipe does he have?
 - (A) 5 feet
 - (B) $5\frac{1}{2}$ feet
 - (C) $5\frac{5}{6}$ feet
 - (D) 6 feet
- A pattern calls for $2\frac{1}{4}$ yards of material and $1\frac{1}{4}$ yards of lining. How much total fabric is needed?
 - (F) $1\frac{1}{2}$ yards
 - (G) 3 yards
 - (H) $3\frac{1}{8}$ yards
 - (I) $3\frac{1}{2}$ yards

Review Grade 5 (MA.5.S.7.1)



- Randy made a graph to keep track of the number of minutes he spent on homework last week. Which statement about the graph is NOT true?
 - (A) Randy spent more time on homework on Monday than on Tuesday
 - (B) Randy spent the greatest amount of time on homework on Wednesday.
 - (C) Randy spent the least amount of time on homework on Friday.
 - (D) Randy spent 155 minutes on homework last week.



Look Back (MA.4.A.1.2, MA.4.A.6.1)



- Zack's family wants to save some money for vacation. They already have saved \$570, but want to have a total of \$1,000. How much more do they need to save?
 - (F) \$630
 - (G) \$570
 - (H) \$470
 - (I) \$430
- Shanice has 14 baseball trading cards. She agrees to sell them to Tomas for \$6 each. How much will she get for the cards?
 - (A) \$94
 - (B) \$84
 - (C) \$72
 - (D) \$64

Name _____

Record Subtraction with Renaming



MA.5.A.2.1 Represent addition and subtraction of decimals and fractions with like and unlike denominators using models, place value or properties.

Find the difference. Write the answer in simplest form.

$$\begin{array}{r} 1. \quad 5\frac{1}{3} \longrightarrow 4\frac{4}{3} \\ -3\frac{2}{3} \longrightarrow 3\frac{2}{3} \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 6 \\ -3\frac{2}{5} \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 5\frac{1}{4} \\ -2\frac{3}{4} \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 9\frac{3}{8} \\ -8\frac{7}{8} \\ \hline \end{array}$$

$$1\frac{2}{3}$$

$$\begin{array}{r} 5. \quad 12\frac{4}{9} \\ -7\frac{5}{9} \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 8\frac{1}{6} \\ -3\frac{5}{6} \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 7\frac{3}{5} \\ -4\frac{4}{5} \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 10\frac{1}{2} \\ -8\frac{1}{2} \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 7\frac{3}{7} \\ -2\frac{5}{7} \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 9\frac{3}{12} \\ -4\frac{7}{12} \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 9\frac{1}{10} \\ -8\frac{7}{10} \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 9\frac{1}{3} \\ -\frac{2}{3} \\ \hline \end{array}$$

Problem Solving



13. Alicia buys a 5-pound bag of rocks for a fish tank. She uses $1\frac{1}{8}$ pounds for a small fish bowl. How much is left?

14. Xavier made 25 pounds of roasted cinnamon almonds for a fair. He has $3\frac{1}{2}$ pounds left at the end of the fair. How many pounds of cinnamon almonds did he sell at the fair?

Lesson Check (MA.5.A.2.1)

- Reggie is making a double-layer cake. The recipe for the first layer calls for $2\frac{1}{4}$ cups of sugar. The recipe for the second layer calls for $1\frac{1}{4}$ cups of sugar. Reginald has a 5-pound bag of sugar. How much will he have after making both recipes?

(A) $1\frac{1}{4}$ cups (C) $2\frac{1}{4}$ cups
 (B) $1\frac{1}{2}$ cups (D) $2\frac{1}{2}$ cups
- Kate has $4\frac{3}{8}$ yards of fabric and needs $2\frac{7}{8}$ yards to make a skirt. How much extra fabric will she have left after making the skirt?

(F) $2\frac{1}{2}$ yards (H) $1\frac{1}{2}$ yards
 (G) $2\frac{1}{4}$ yards (I) $1\frac{1}{4}$ yards

Review Grade 5 (MA.5.A.4.1)

- Nick picked up 46 pieces of trash during the schoolyard cleanup. He picked up 12 more pieces of trash than Yvette. Which equation can be used to find y , the number of pieces of trash Yvette picked up?

(A) $46 + 12 = y$ (C) $46 = y + 12$
 (B) $46 + y = 12$ (D) $46 = y - 12$
- Mr. Martin and Ms. Green have the same number of students in their art classes. Mr. Martin displays his students' pictures on the bulletin board in 4 rows with 6 pictures in each row. Ms. Green displays her students' pictures in 3 rows. Which equation can be used to find p , the number of pictures Ms. Green puts in each row?

(F) $6 + 4 = 3 \times p$ (H) $6 \times 4 = 3 \times p$
 (G) $6 \times 3 = 4 \times p$ (I) $3 + 4 = 6 + p$

← SPIRAL REVIEW

Look Back (MA.4.A.6.4, MA.4.A.6.1)

- Vontrell made a 3-digit password that is a multiple of 8. Which of the following could NOT be the password?

(A) 216
 (B) 324
 (C) 432
 (D) 560
- 31,675 people went to a theme park in one weekend. If there are 18,391 attendees on Saturday, how many were there Sunday?

(F) 50,066
 (G) 49,966
 (H) 17,324
 (I) 13,284

← SPIRAL REVIEW

Name _____

Fractions and Properties of Addition



MA.5.A.2.1 Represent addition and subtraction of decimals and fractions with like and unlike denominators using models, place value or properties.

Use the properties and mental math to solve. Simplify your answer.

1. $5\frac{1}{3} + (2\frac{2}{3} + 1\frac{1}{3})$

$5\frac{1}{3} + (4)$

$9\frac{1}{3}$

2. $10\frac{1}{8} + (3\frac{5}{8} + 2\frac{7}{8})$

3. $8\frac{1}{5} + (3\frac{2}{5} + 5\frac{4}{5})$

4. $6\frac{3}{4} + (4\frac{2}{4} + 5\frac{1}{4})$

5. $(6\frac{3}{6} + 10\frac{4}{6}) + 9\frac{2}{6}$

6. $(6\frac{2}{5} + 1\frac{4}{5}) + 3\frac{1}{5}$

7. $7\frac{7}{8} + (3\frac{1}{8} + 1\frac{1}{8})$

8. $14\frac{1}{10} + (20\frac{2}{10} + 15\frac{7}{10})$

9. $(13\frac{2}{12} + 8\frac{7}{12}) + 9\frac{5}{12}$

Problem Solving

10. Nate's classroom has three tables of different lengths. One has a length of $4\frac{1}{2}$ feet, another has a length of 4 feet, and a third has a length of $2\frac{1}{2}$ feet. What is the length if all three tables when pushed together?

11. Mr. Warren uses $2\frac{1}{4}$ bags of mulch for his garden and another $4\frac{1}{4}$ bags for his front yard. He also uses $\frac{3}{4}$ bag around a fountain. How many total bags of mulch does Mr. Warren use?

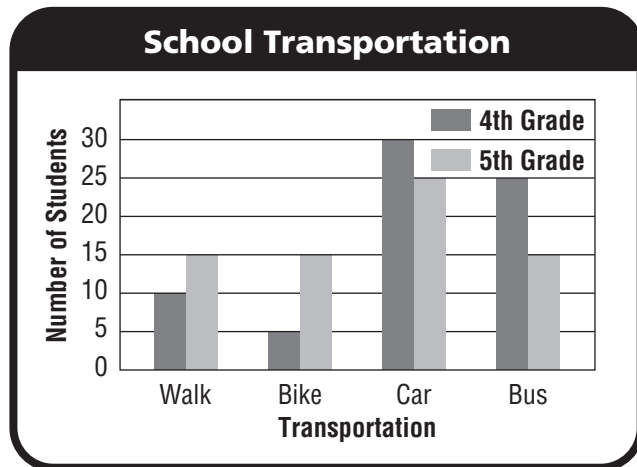
Lesson Check (MA.5.A.2.2)

- Use the properties and mental math to solve $6\frac{2}{3} + (3\frac{1}{3} + 7\frac{1}{3})$.
 - (A) 16
 - (B) $16\frac{4}{9}$
 - (C) 17
 - (D) $17\frac{1}{3}$
- Seth has three lengths of rope: $4\frac{1}{4}$ yards, $5\frac{3}{4}$ yards, and $8\frac{1}{4}$ yards. How much rope does he have altogether?
 - (F) $17\frac{5}{12}$ yards
 - (G) $17\frac{3}{4}$ yards
 - (H) $18\frac{1}{4}$ yards
 - (I) $18\frac{3}{4}$ yards

Review Grade 5 (MA.5.S.7.1)

- The graph shows how the 4th-grade and 5th-grade students at Crestview Elementary travel to school each morning. How many more 4th graders than 5th graders ride a bus?

- (A) 25
- (B) 15
- (C) 10
- (D) 5



Look Back (MA.4.A.1.2, MA.4.A.6.1)

- Leslie runs 3 miles every day. How far will she run in one week?
 - (F) 10 miles
 - (G) 15 miles
 - (H) 21 miles
 - (I) 30 miles
- Last week, Marcus' older brother lifted 245 pounds at the gym. This week the most he could lift was 270 pounds. How much more did he lift this week?
 - (A) 25 pounds
 - (B) 35 pounds
 - (C) 505 pounds
 - (D) 515 pounds



Name _____

Chapter 6 Extra Practice

Lesson 6.1 (pp. 231–234)

Draw a model to represent the addition problem. Record the sum.

1. $\frac{2}{5} + \frac{3}{5} = \blacksquare$

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

3. $\frac{4}{7} + \frac{2}{7} = \blacksquare$

4. $\frac{3}{4} + \frac{2}{4} = \blacksquare$

Lesson 6.2 (pp. 235–238)

Draw a model to represent the subtraction problem. Record the difference.

1. $\frac{7}{9} - \frac{3}{9} = \blacksquare$

2. $\frac{5}{3} - \frac{2}{3} = \blacksquare$

3. $\frac{6}{10} - \frac{4}{10} = \blacksquare$

4. $\frac{1}{12} - \frac{1}{12} = \blacksquare$

Lesson 6.3 (pp. 239–242)

Tell whether the number is divisible by 2, 3, 4, 5, 6, 9, or 10.

1. 290

2. 3,240

3. 843

Solve.

4. Mr. Tran asks his students to write a number that is divisible by 2 and 3, but not by 9. What number could they write?

5. A school custodian wants to arrange 84 chairs in equal rows of 6. Can he do this without having any chairs left over? How many rows of chairs will there be?

Lesson 6.4 (pp. 243–246)

Tell whether the number is *prime* or *composite*.

1. 246

2. 101

3. 405

Lesson 6.5 (pp. 247–250)

Find the prime factorization. Use a factor tree or a ladder diagram.

1. 42

2. 51

3. 232

4. 125

Lesson 6.6 (pp. 251–254)

List the common factors for each pair of numbers.

Circle the greatest common factor.

1. 3, 12

2. 60, 70

3. 24, 54

4. 27, 30

Name the GCF of the numerator and the denominator.

Then write each fraction in simplest form.

5. $\frac{5}{25}$

6. $\frac{18}{40}$

7. $\frac{21}{28}$

8. $\frac{6}{10}$

Name _____

Chapter 6 Extra Practice

Lesson 6.7 (pp. 255–258)

Solve.

- Hana is putting the fruit she bought into bowls. She bought 8 melons, 12 pears, and 24 apples. She puts the same number of pieces of fruit in each bowl and puts only one type of fruit in each bowl. What is the greatest number of pieces Hana can put in each bowl?
- A store owner is arranging clothing on racks. She has 30 sweaters, 45 shirts, and 15 pairs of jeans. She wants to put the same number of items on each rack, with one type of item on each. What is the greatest number of items she can put on a rack?

Lesson 6.8 (pp. 261–264)

Write each mixed number as a fraction.

1. $4\frac{2}{3} =$ _____

2. $6\frac{1}{4} =$ _____

3. $1\frac{2}{9} =$ _____

4. $2\frac{3}{5} =$ _____

Write each fraction as a mixed number.

5. $\frac{8}{5} =$ _____

6. $\frac{13}{6} =$ _____

7. $\frac{11}{3} =$ _____

8. $\frac{16}{15} =$ _____

Lesson 6.9 (pp. 265–268)

Find the sum. Write it in simplest form.

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

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

3. $\frac{8}{9} + \frac{4}{9} =$ _____

4. $\frac{2}{10} + \frac{4}{10} =$ _____

Find the difference. Write it in simplest form.

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

6. $\frac{5}{8} - \frac{3}{8} =$ _____

7. $\frac{5}{4} - \frac{1}{4} =$ _____

8. $\frac{7}{12} - \frac{1}{12} =$ _____

Lesson 6.10 (pp. 269–272)

Find the sum or difference. Write your answer in simplest form.

$$\begin{array}{r} 1. \quad 3\frac{1}{4} \\ + 2\frac{3}{4} \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 1\frac{5}{12} \\ + 2\frac{1}{12} \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 9\frac{5}{6} \\ - 7\frac{1}{6} \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 7\frac{11}{16} \\ - 4\frac{3}{16} \\ \hline \end{array}$$

Lesson 6.11 (pp. 273–276)

Find the difference. Write the answer in simplest form.

$$\begin{array}{r} 1. \quad 5\frac{3}{8} \\ - 4\frac{5}{8} \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 8 \\ - 3\frac{1}{2} \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 6\frac{2}{7} \\ - 2\frac{4}{7} \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 9\frac{3}{10} \\ - 1\frac{7}{10} \\ \hline \end{array}$$

5. Nick practiced the guitar for $2\frac{1}{3}$ hours on Saturday and $1\frac{2}{3}$ hours on Sunday. How much longer did Nick practice on Saturday than on Sunday?

6. Olivia gave piano lessons for $9\frac{1}{4}$ hours last week. She gave flute lessons for $6\frac{3}{4}$ hours this week. For how many more hours did she give piano lessons than flute lessons?

Lesson 6.12 (pp. 277–280)

Use the properties and mental math to solve. Simplify your answer.

$$1. \quad \left(1\frac{1}{4} + 4\right) + 2\frac{3}{4}$$

$$2. \quad \frac{3}{5} + \left(90\frac{2}{5} + 10\right)$$

$$3. \quad 3\frac{2}{7} + \left(2\frac{1}{7} + \frac{5}{7}\right)$$

$$4. \quad \left(\frac{5}{8} + 2\frac{3}{8}\right) + 1\frac{3}{8}$$
