School-Home Letter

Vocabulary

denominator The part of a fraction below the line that tells how many equal parts are in the whole or in the group

equal parts Parts that are exactly the same size

fraction A number that names part of a whole or part of a group

numerator The part of a fraction above the line that tells how many equal parts are being counted

unit fraction A fraction that names 1 equal part of a whole. It has 1 as its top number, or numerator.
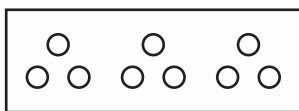
Dear Family,

During the next few weeks, our math class will be learning about fractions. We will learn to identify, read, and write fractions as part of a whole and as part of a group.

You can expect to see homework that provides practice with fractions.

Here is a sample of how your child will be taught to use unit fractions to find a fractional part of a group.

🔑 MODEL Find How Many in a Fractional Part of a Group

This is how we will be finding how many are in a fractional part of a group.

Tips

Equal Groups or Parts

Before you name a fraction, be sure there are equal groups or parts.
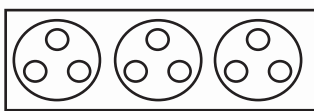
STEP 1

Find $\frac{1}{3}$ of 9.

Put 9 counters on your MathBoard.

STEP 2

Since you want to find $\frac{1}{3}$ of the group, there should be 3 equal groups.

STEP 3

Circle one of the groups to show $\frac{1}{3}$. Then count the number of counters in that group.

There are 3 counters in 1 group.

So, $\frac{1}{3}$ of 9 = 3.

Activity

Display a group of 12 objects, such as crayons. Have your child find fractional parts of the group by counting objects in equal groups. Ask your child to find these fractional groups of 12: $\frac{1}{2}$ (6), $\frac{1}{3}$ (4), $\frac{1}{4}$ (3), $\frac{1}{6}$ (2).

Carta para la casa

Querida familia,

Durante las próximas semanas, en la clase de matemáticas aprenderemos sobre las fracciones. Aprenderemos a identificar, leer y escribir fracciones como parte de un todo y como parte de un grupo.

Llevaré a la casa tareas que sirven para practicar las fracciones.

Este es un ejemplo de la manera como aprenderemos a usar fracciones para hallar una parte fraccionaria de un grupo.

Vocabulario

denominador La parte de una fracción que está debajo de la barra y que indica cuántas partes iguales hay en el entero o en el grupo

partes iguales Las partes que son exactamente del mismo tamaño

fracción Un número que representa una parte de un todo o una parte de un grupo

numerador La parte de una fracción que está arriba de la barra y que indica cuántas partes iguales del entero se están tomando en cuenta

fracción unitaria Una fracción que se refiere a 1 parte igual de un entero. Tiene un 1 en la parte de arriba o numerador.
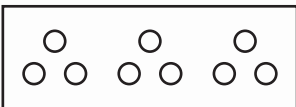
🔑 MODELO Hallar cuántos hay en una parte fraccionaria de un grupo

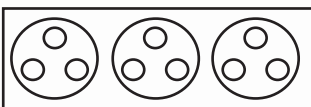Así es como hallaremos cuántos hay en una parte fraccionaria de un grupo.

PASO 1

Halla $\frac{1}{3}$ de 9.

Coloca 9 fichas en el *MathBoard*.

PASO 2

Como quieres hallar $\frac{1}{3}$ del grupo, debe haber 3 grupos iguales.

PASO 3

Encierra en un círculo uno de los grupos para mostrar $\frac{1}{3}$. Luego cuenta la cantidad de fichas en el grupo.

Hay 3 fichas en 1 grupo. Por lo tanto, $\frac{1}{3}$ de 9 = 3.

Pistas

Grupos o partes iguales

Antes de que nombres una fracción, asegúrate de que haya grupos o partes iguales.

Actividad

Muestre un grupo de 12 objetos, como crayolas. Pida a su hijo que halle las partes fraccionarias del grupo contando objetos en grupos iguales. Luego, pídale que halle estos grupos fraccionarios de 12: $\frac{1}{2}$ (6), $\frac{1}{3}$ (4), $\frac{1}{4}$ (3), $\frac{1}{6}$ (2).
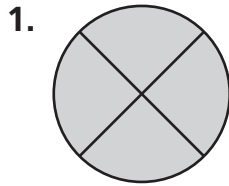
Name _____

Equal Parts of a Whole

**Write the number of equal parts.
Then write the name for the parts.**

1.

<u> **4** </u> equal parts

<u> **fourths** </u>

2.

_____ equal parts

_____

3.

_____ equal parts

_____

4.
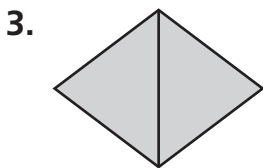
_____ equal parts

_____

Write whether the shape is divided into _equal_ parts or _unequal_ parts.

5.

_____ parts

6.
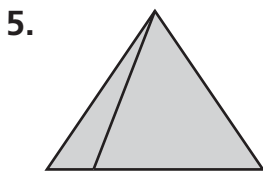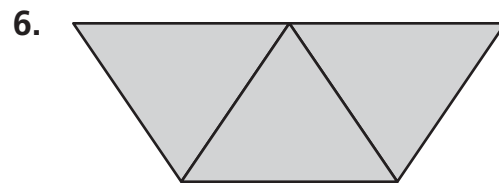
_____ parts

Problem Solving REAL WORLD

7. Diego cuts a round pizza into eight equal slices. What is the name for the parts?

_____

8. Madison is making a place mat. She divides it into 6 equal parts to color. What is the name for the parts?
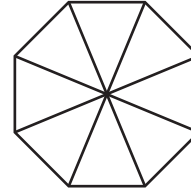
_____

Lesson Check (MACC.3.NF.1.1)

1. How many equal parts are in this shape?

Ⓐ 3

Ⓑ 4

Ⓒ 5

Ⓓ 6

2. What is the name for the equal parts of the whole?

Ⓐ fourths   Ⓒ eighths

Ⓑ sixths   Ⓓ thirds

Spiral Review (MACC.3.OA.1.3, MACC.3.OA.3.7)

3. Use a related multiplication fact to find the quotient. (Lesson 6.8)

$49 \div 7 = \boxed{}$

Ⓐ 6   Ⓒ 8

Ⓑ 7   Ⓓ 9

4. Find the unknown factor and quotient. (Lesson 6.8)

$9 \times \boxed{} = 45$

$45 \div 9 = \boxed{}$

Ⓐ 4   Ⓒ 6

Ⓑ 5   Ⓓ 7

5. There are 5 pairs of socks in one package. Matt buys 3 packages of socks. How many pairs of socks in all does Matt buy? (Lesson 4.2)

Ⓐ 30

Ⓑ 15

Ⓒ 10

Ⓓ 8

6. Mrs. McCarr buys 9 packages of markers for an art project. Each package has 10 markers. How many markers in all does Mrs. McCarr buy? (Lesson 4.2)
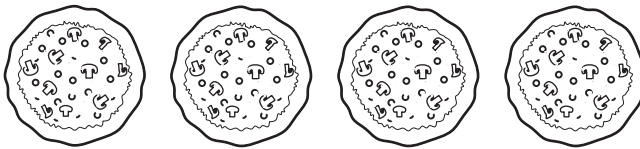
Ⓐ 10

Ⓑ 19

Ⓒ 81

Ⓓ 90

Name _____

Equal Shares

For 1–2, draw lines to show how much each person gets. Write the answer.

1. 6 friends share 3 sandwiches equally.

3 sixths of a sandwich _____

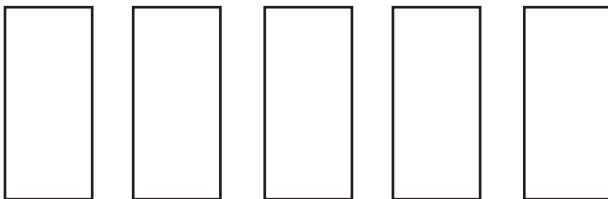**2.** 8 classmates share 4 pizzas equally.

_____

3. 4 teammates share 5 granola bars equally. Draw to show how much each person gets. Shade the amount that one person gets. Write the answer.
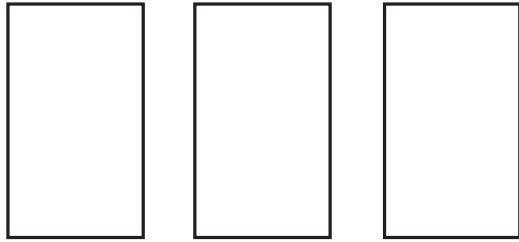
_____

Problem Solving REAL WORLD

4. Three brothers share 2 sandwiches equally. How much of a sandwich does each brother get?

_____

_____

5. Six neighbors share 4 pies equally. How much of a pie does each neighbor get?

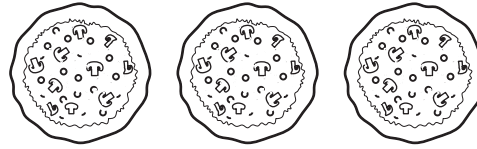_____

_____

Lesson Check (MACC.3.NF.1.1)

1. Two friends share 3 fruit bars equally. How much does each friend get?

☐ ☐ ☐

(A) 1 half   (C) 2 halves

(B) 2 thirds   (D) 3 halves

2. Four brothers share 3 pizzas equally. How much of a pizza does each brother get?

(A) 3 halves

(B) 4 thirds

(C) 3 fourths

(D) 2 fourths

Spiral Review (MACC.3.OA.1.3, MACC.3.OA.3.7, MACC.3.NBT.1.2)

3. Find the quotient. (Lesson 7.4)

$$3\overline{)27}$$

(A) 6

(B) 7

(C) 8

(D) 9

4. Tyrice put 4 cookies in each of 7 bags. How many cookies in all did he put in the bags? (Lesson 4.5)

(A) 11   (C) 32

(B) 28   (D) 40

5. Ryan earns $5 per hour raking leaves. He earned $35. How many hours did he rake leaves? (Lesson 7.3)

(A)   5 hours

(B)   6 hours

(C)   7 hours

(D) 35 hours

6. Hannah has 229 horse stickers and 164 kitten stickers. How many more horse stickers than kitten stickers does Hannah have? (Lesson 1.10)

(A) 45   (C) 145

(B) 65   (D) 293
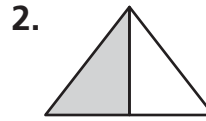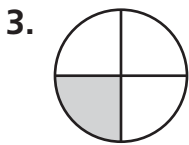
Name _____

Unit Fractions of a Whole

**Write the number of equal parts in the whole.
Then write the fraction that names the shaded part.**

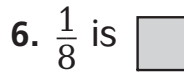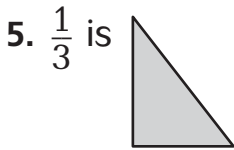**1.**

_____**6**_____ equal parts

$\frac{1}{6}$
_____

2.

_____ equal parts

_____

3.

_____ equal parts

_____

4.
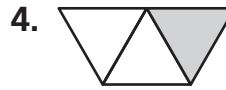
_____ equal parts

_____

Draw a picture of the whole.

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

6. $\frac{1}{8}$ is

Problem Solving REAL WORLD

7. Tyler made a pan of cornbread. He cut it into 8 equal pieces and ate 1 piece. What fraction of the cornbread did Tyler eat?

_____

8. Anna cut an apple into 4 equal pieces. She gave 1 piece to her sister. What fraction of the apple did Anna give to her sister?

_____

Lesson Check (MACC.3.NF.1.1)

1. What fraction names the shaded part?

(A) $\frac{1}{3}$

(B) $\frac{1}{4}$

(C) $\frac{1}{6}$

(D) $\frac{1}{8}$

2. Tasha cut a fruit bar into 3 equal parts. She ate 1 part. What fraction of the fruit bar did Tasha eat?

(A) $\frac{1}{2}$

(B) $\frac{1}{3}$

(C) $\frac{1}{4}$

(D) $\frac{1}{6}$

Spiral Review (MACC.3.OA.1.3, MACC.3.OA.2.5, MACC.3.MD.2.3)

3. Alex has 5 lizards. He divides them equally among 5 cages. How many lizards does Alex put in each cage? (Lesson 6.9)

(A) 0

(B) 1

(C) 5

(D) 10

4. Find the product. (Lesson 3.7)

$8 \times 1 = \boxed{}$

(A) 0

(B) 1

(C) 8

(D) 9

5. Leo bought 6 chew toys for his new puppy. Each chew toy cost $4. How much did Leo spend in all for the chew toys? (Lesson 4.1)

(A) $10

(B) $12

(C) $18

(D) $24

6. Lilly is making a picture graph. Each picture of a star is equal to two books she has read. The row for the month of December has 3 stars. How many books did Lilly read during the month of December? (Lesson 2.2)
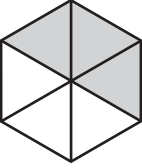
(A) 3

(B) 5

(C) 6

(D) 9

Name _____

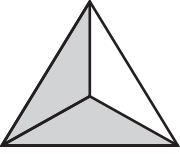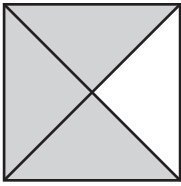# Fractions of a Whole

**Write the fraction that names each part. Write a fraction
in words and in numbers to name the shaded part.**

1.

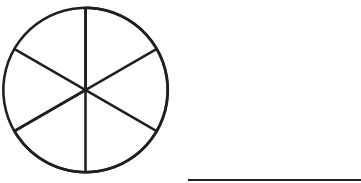Each part is ____$\frac{1}{6}$____.

____**three**____ sixths

____$\frac{3}{6}$____

2.

Each part is _____.

_____ eighths

_____

3.

Each part is _____.
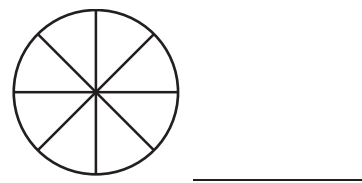
_____ thirds

_____

4.

Each part is _____.

_____ fourths

_____

**Shade the fraction circle to model the fraction.
Then write the fraction in numbers.**

5. four out of six

_____

6. eight out of eight

_____

Problem Solving REAL WORLD

7. Emma makes a poster for the
school's spring concert. She divides
the poster into 8 equal parts. She
uses two of the parts for the title.
What fraction of the poster does
Emma use for the title?

_____

8. Lucas makes a flag. It has 6 equal
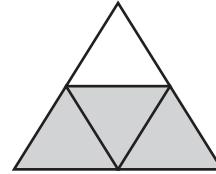parts. Five of the parts are red. What
fraction of the flag is red?

_____

Lesson Check (MACC.3.NF.1.1)

1. What fraction names the shaded part?

(A) $\frac{4}{6}$　　　(C) $\frac{4}{8}$
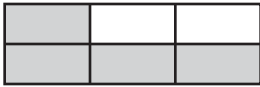
(B) $\frac{2}{4}$　　　(D) $\frac{2}{6}$

2. What fraction names the shaded part?

(A) one fourth

(B) one third

(C) three fourths

(D) four thirds

Spiral Review (MACC.3.OA.3.7, MACC.3.NBT.1.2, MACC.3.MD.2.3)

3. Sarah biked for 115 minutes last week. Jennie biked for 89 minutes last week. How many minutes in all did the girls bike? (Lesson 1.7)

(A) 26 minutes　(C) 204 minutes

(B) 194 minutes　(D) 294 minutes

4. Harrison made a building using 124 blocks. Greyson made a building using 78 blocks. How many more blocks did Harrison use than Greyson did? (Lesson 1.10)

(A) 46　　　(C) 154

(B) 56　　　(D) 202

5. Von bought a bag of 24 dog treats. He gives his puppy 3 treats a day. How many days will the bag of dog treats last? (Lesson 7.4)

(A) 3 days

(B) 6 days

(C) 8 days

(D) 21 days

6. How many students chose swimming? (Lesson 2.2)

Favorite Activity	
Skating	☺☺
Swimming	☺☺☺☺☺
Biking	☺☺☺☺
Key: Each ☺ = 5 votes.	

(A) 5　　　(C) 20

(B) 10　　　(D) 25
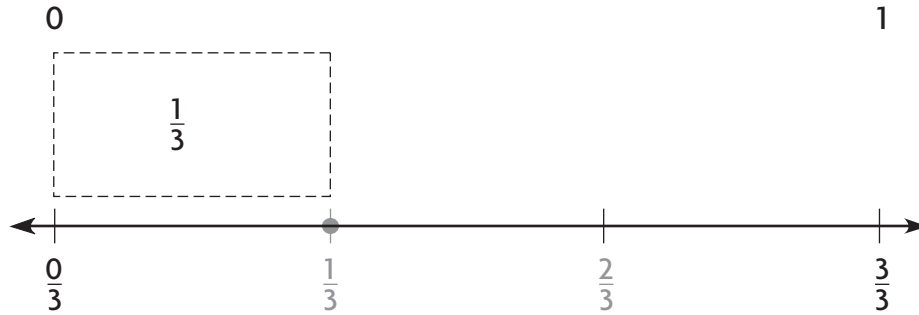
Name _____

Fractions on a Number Line

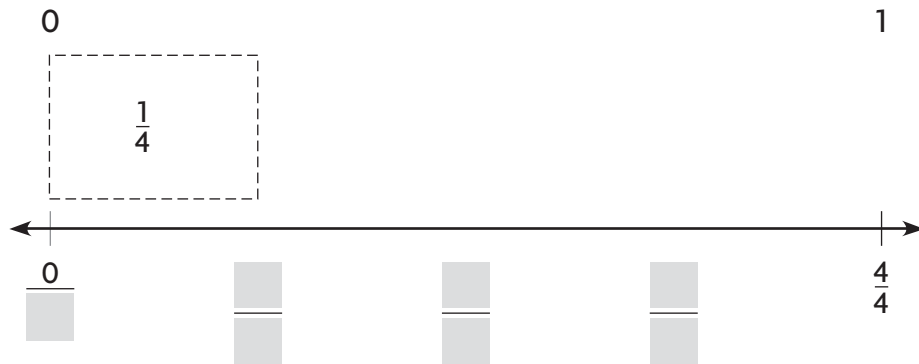**COMMON CORE STANDARDS** MACC.3.NF.1.2a, MACC.3.NF.1.2b

Develop understanding of fractions as numbers.

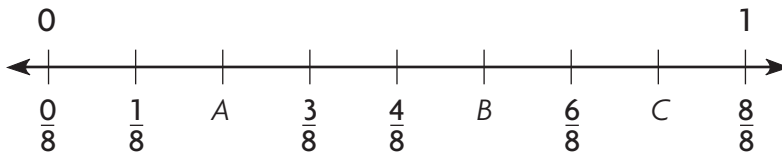**Use fraction strips to help you complete the number line. Then locate and draw a point for the fraction.**

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

0   1

$\frac{1}{3}$

$\frac{0}{3}$ $\frac{1}{3}$ $\frac{2}{3}$ $\frac{3}{3}$

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

0   1

$\frac{1}{4}$

$\frac{0}{}$ $\frac{4}{4}$

Write the fraction that names the point.

0   1

$\frac{0}{8}$ $\frac{1}{8}$ A $\frac{3}{8}$ $\frac{4}{8}$ B $\frac{6}{8}$ C $\frac{8}{8}$

**3.** point A _____   **4.** point B _____   **5.** point C _____

Problem Solving REAL WORLD

6. Jade ran 6 times around her neighborhood to complete a total of 1 mile. How many times will she need to run to complete $\frac{5}{6}$ of a mile?

_____

7. A missing fraction on a number line is located exactly halfway between $\frac{3}{6}$ and $\frac{5}{6}$. What is the missing fraction?

_____

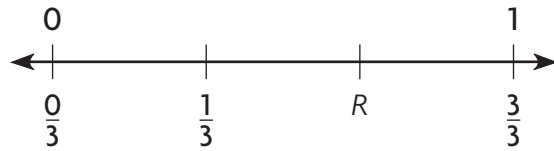## Lesson Check

1. Which fraction names point G on the number line?

```
0                               1
|---+---+---+---+---|-->
0   G   2   3   4
4       4   4   4
```
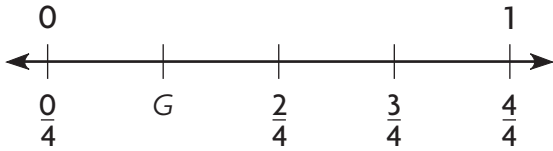
(A) $\frac{1}{4}$ (C) $\frac{4}{4}$

(B) $\frac{2}{4}$ (D) $\frac{4}{1}$

2. Which fraction names point R on the number line?

```
0                               1
|---+---+---+---+---|-->
0       1       R   3
3       3           3
```

(A) $\frac{1}{3}$ (C) $\frac{3}{3}$

(B) $\frac{2}{3}$ (D) $\frac{3}{2}$

Spiral Review

3. Each table in the cafeteria can seat 10 students. How many tables are needed to seat 40 students?
(Lesson 7.2)

(A) 10   (C) 5

(B) 8   (D) 4

4. Which is an example of the Commutative Property of Multiplication? (Lesson 3.6)

(A) $6 \times 1 = 6 \times 1$

(B) $4 + 9 = 4 \times 9$

(C) $4 \times 9 = 9 \times 4$

(D) $6 \times 3 = 2 \times 9$

5. Pedro shaded part of a circle. Which fraction names the shaded part? (Lesson 8.4)
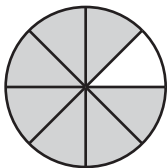
(A) $\frac{1}{8}$ (C) $\frac{7}{8}$

(B) $\frac{1}{7}$ (D) $\frac{8}{7}$

6. Which is true?
(Lesson 6.9)

(A) $8 \div 1 = 8$

(B) $8 \div 8 = 8$
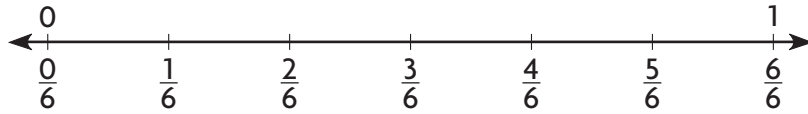
(C) $8 \times 0 = 8$

(D) $1 = 8 \times 1$

Name _____

Relate Fractions and Whole Numbers

Use the number line to find whether the two numbers are equal. Write *equal* or *not equal*.

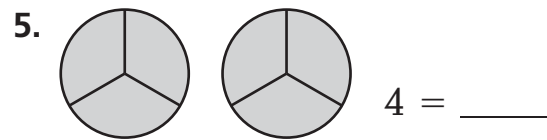0   1

$\frac{0}{6}$ $\frac{1}{6}$ $\frac{2}{6}$ $\frac{3}{6}$ $\frac{4}{6}$ $\frac{5}{6}$ $\frac{6}{6}$

1. $\frac{0}{6}$ and 1   **2.** 1 and $\frac{6}{6}$ **3.** $\frac{1}{6}$ and $\frac{6}{6}$

____**not equal**____   _____   _____

Each shape is 1 whole. Write a fraction greater than 1 for the parts that are shaded.

4.   2 = _____   **5.**   4 = _____
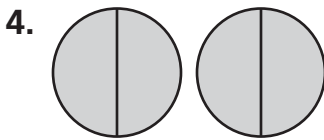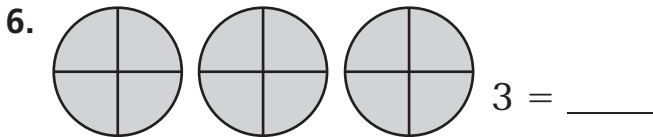
6.   3 = _____   **7.**   1 = _____

Problem Solving REAL WORLD

8. Rachel jogged along a trail that was $\frac{1}{4}$ of a mile long. She jogged along the trail 8 times. How many miles did Rachel jog in all?

_____

9. Jon ran around a track that was $\frac{1}{8}$ of a mile long. He ran around the track 24 times. How many miles did Jon run in all?
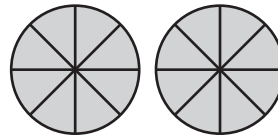
_____

Lesson Check (MACC.3.NF.1.3c)

1. Each shape is 1 whole. Which fraction greater than 1 names the parts that are shaded?
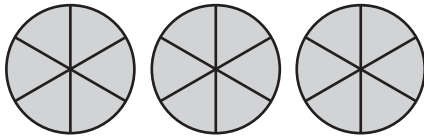
(A) $\frac{6}{18}$ (C) $\frac{6}{3}$

(B) $\frac{3}{6}$ (D) $\frac{18}{6}$

2. Each shape is 1 whole. Which fraction greater than 1 names the parts that are shaded?

(A) $\frac{8}{2}$ (C) $\frac{8}{16}$

(B) $\frac{16}{8}$ (D) $\frac{2}{8}$

Spiral Review (MACC.3.OA.1.3, MACC.3.OA.3.7, MACC.3.NBT.1.2, MACC.3.NF.1.1)

3. Tara has 598 pennies and 231 nickels. How many pennies and nickels does she have in all? (Lesson 1.7)

$$598$$
$$+\ 231$$

(A) 719   (C) 819

(B) 729   (D) 829

4. Dylan read 6 books. Kylie read double the number of books that Dylan read. How many books did Kylie read? (Lesson 4.1)

(A) 4

(B) 8

(C) 12

(D) 14

5. Alyssa divides a granola bar into halves. How many equal parts are there? (Lesson 8.1)

(A) 2   (C) 4

(B) 3   (D) 6

6. There are 4 students in each small reading group. If there are 24 students in all, how many reading groups are there? (Lesson 7.5)
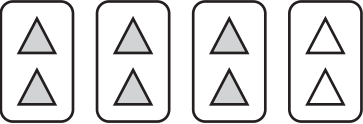
(A) 5   (C) 7

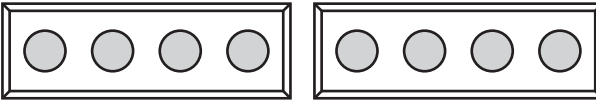(B) 6   (D) 8

Name _____
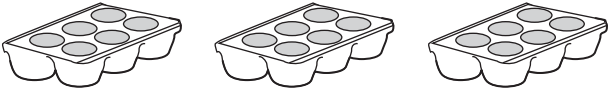
Fractions of a Group

Write a fraction to name the shaded part of each group.

1.

$\dfrac{6}{8}$ _____

2.

_____

Write a whole number and a fraction greater than 1 to name the part filled. Think: 1 container = 1

3.

_____ _____

4.

_____ _____

Draw a quick picture. Then, write a fraction to name the shaded part of the group.

5. Draw 4 circles.
Shade 2 circles.

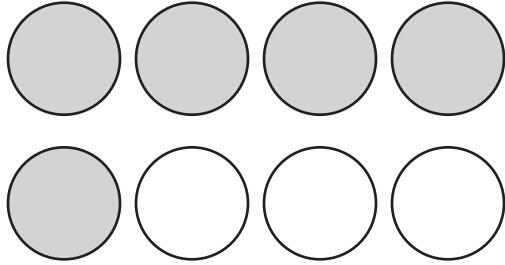_____

6. Draw 6 circles.
Make 3 groups.
Shade 1 group.

_____

Problem Solving REAL WORLD

7. Brian has 3 basketball cards and 5 baseball cards. What fraction of Brian's cards are baseball cards?

_____

8. Sophia has 3 pink tulips and 3 white tulips. What fraction of Sophia's tulips are pink?

_____

Lesson Check (MACC.3.NF.1.1)

1. What fraction of the group is shaded?

Ⓐ $\frac{5}{3}$ Ⓒ $\frac{3}{5}$

Ⓑ $\frac{5}{8}$ Ⓓ $\frac{3}{8}$

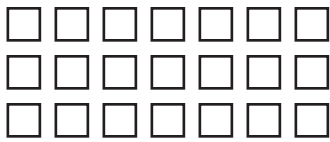**2.** What fraction of the group is shaded?

Ⓐ $\frac{1}{4}$

Ⓑ $\frac{1}{2}$

Ⓒ $\frac{2}{4}$

Ⓓ $\frac{4}{1}$

Spiral Review (MACC.3.OA.1.3, MACC.3.OA.3.7, MACC.3.NBT.1.2)

3. Which number sentence does the array represent? (Lesson 4.5)

Ⓐ $4 \times 7 = 28$

Ⓑ $3 \times 8 = 24$

Ⓒ $3 \times 7 = 21$

Ⓓ $3 \times 6 = 18$

4. Juan has 436 baseball cards and 189 football cards. How many more baseball cards than football cards does Juan have? (Lesson 1.10)

Ⓐ 625

Ⓑ 353

Ⓒ 347

Ⓓ 247

5. Sydney bought 3 bottles of glitter. Each bottle of glitter cost $6. How much did Sydney spend in all on the bottles of glitter? (Lesson 4.3)

Ⓐ $24   Ⓒ $12

Ⓑ $18   Ⓓ $9

6. Add. (Lesson 1.7)

$$262 + 119$$

Ⓐ 143   Ⓒ 381

Ⓑ 371   Ⓓ 481

Find Part of a Group Using Unit Fractions

Circle equal groups to solve. Count the number of items in 1 group.

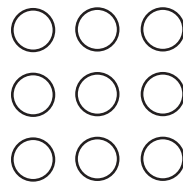**1.** $\frac{1}{4}$ of 12 = __**3**__
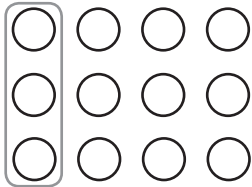
2. $\frac{1}{8}$ of 16 = _____
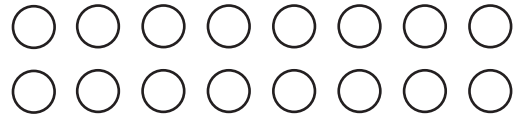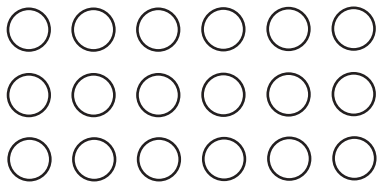

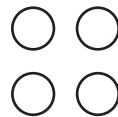**3.** $\frac{1}{3}$ of 12 = _____
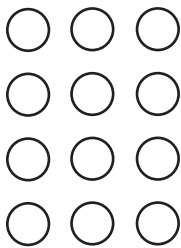
4. $\frac{1}{3}$ of 9 = _____

5. $\frac{1}{6}$ of 18 = _____

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

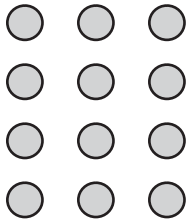## Problem Solving REAL WORLD

7. Marco drew 24 pictures. He drew $\frac{1}{6}$ of them in art class. How many pictures did Marco draw in art class?

_____

8. Caroline has 16 marbles. One eighth of them are blue. How many of Caroline's marbles are blue?
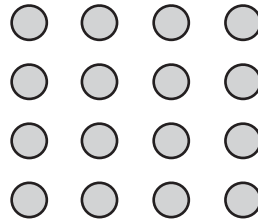
_____

Lesson Check (MACC.3.NF.1.1)

1. Ms. Davis made 12 blankets for her grandchildren. One third of the blankets are blue. How many blue blankets did she make?

(A) 3   (C) 9
(B) 4   (D) 12

2. Jackson mowed 16 lawns. One fourth of the lawns are on Main Street. How many lawns on Main Street did Jackson mow?

(A) 4   (C) 8
(B) 6   (D) 12

Spiral Review (MACC.3.OA.3.7, MACC.3.NBT.1.1, MACC.3.NBT.1.2)

3. Find the difference. (Lesson 1.10)

$$509 - 175$$

(A) 334
(B) 374
(C) 434
(D) 474

4. Find the quotient. (Lesson 7.6)

$6\overline{)54}$

(A) 6
(B) 7
(C) 8
(D) 9

5. There are 226 pets entered in the pet show. What is 226 rounded to the nearest hundred? (Lesson 1.2)

(A) 200   (C) 300
(B) 220   (D) 400

6. Ladonne made 36 muffins. She put the same number of muffins on each of 4 plates. How many muffins did she put on each plate? (Lesson 7.5)
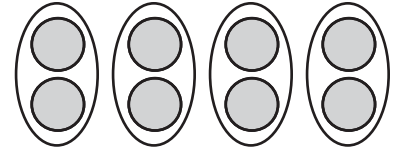
(A) 3   (C) 9
(B) 6   (D) 12

Problem Solving • Find the Whole Group Using Unit Fractions

COMMON CORE STANDARD MACC.3.NF.1.1
Develop understanding of fractions as numbers.

Draw a quick picture to solve.

1. Katrina has 2 blue ribbons for her hair. One fourth of all her ribbons are blue. How many ribbons does Katrina have in all?

8 ribbons

2. One eighth of Tony's books are mystery books. He has 3 mystery books. How many books does Tony have in all?

_____

3. Brianna has 4 pink bracelets. One third of all her bracelets are pink. How many bracelets does Brianna have?

_____

4. Ramal filled 3 pages in a stamp album. This is one sixth of the pages in the album. How many pages are there in Ramal's stamp album?

_____

5. Jeff helped repair one half of the bicycles in a bike shop last week. If Jeff worked on 5 bicycles, how many bicycles did the shop repair in all last week?

_____

6. Layla collects postcards. She has 7 postcards from Europe. Her postcards from Europe are one third of her total collection. How many postcards in all does Layla have?

_____

Lesson Check (MACC.3.NF.1.1)

1. A zoo has 2 male lions. One sixth of the lions are male lions. How many lions are there at the zoo?
   - (A) 4
   - (B) 6
   - (C) 8
   - (D) 12

2. Max has 5 red model cars. One third of his model cars are red. How many model cars does Max have?
   - (A) 15
   - (B) 12
   - (C) 10
   - (D) 8

Spiral Review (MACC.3.OA.1.3, MACC.3.NBT.1.1, MACC.3.NBT.1.2, MACC.3.NF.1.1)

3. There are 382 trees in the local park. What is the number of trees rounded to the nearest hundred? (Lesson 1.2)
   - (A) 300
   - (B) 380
   - (C) 400
   - (D) 500

4. The Jones family is driving 458 miles on their vacation. So far, they have driven 267 miles. How many miles do they have left to drive? (Lesson 1.10)

   458
   − 267

   - (A) 191 miles
   - (B) 201 miles
   - (C) 211 miles
   - (D) 291 miles

5. Ken has 6 different colors of marbles. He has 9 marbles of each color. How many marbles does Ken have in all? (Lesson 4.3)
   - (A) 15
   - (B) 45
   - (C) 54
   - (D) 63

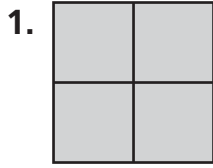6. Eight friends share two pizzas equally. How much of a pizza does each friend get? (Lesson 8.2)
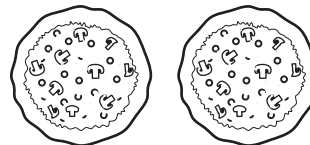
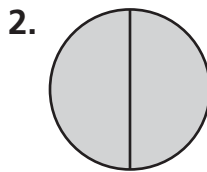

   - (A) 8 halves
   - (B) 4 eighths
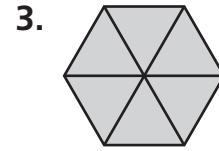   - (C) 2 sixths
   - (D) 2 eighths

Chapter 8 Extra Practice

Lesson 8.1

Write the number of equal parts. Then write the name for the parts.

1.

2.

3.

____ equal parts

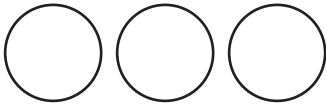____ equal parts
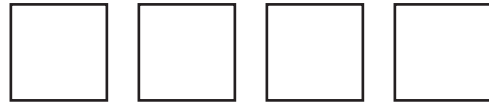
____ equal parts

_____

_____

_____

Lesson 8.2

Draw lines to show how much each person gets. Write the answer.

1. 4 friends share 3 oranges equally.

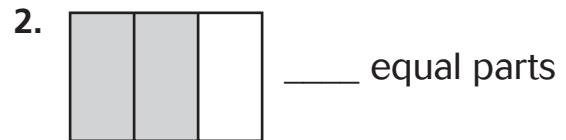**2.** 6 sisters share 4 sandwiches equally.

_____

_____

_____

_____

Lessons 8.3 – 8.4

Write the number of equal parts in the whole. Write a fraction in words and in numbers to name the shaded part.

1.

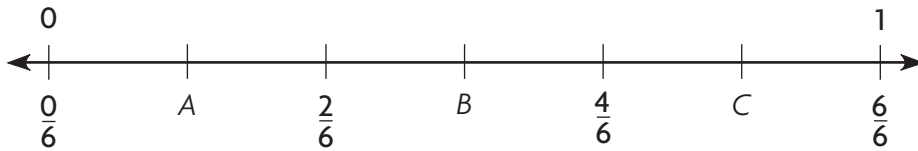____ equal parts

_____ eighths

_____

2.

____ equal parts

_____ thirds

_____

Lesson 8.5

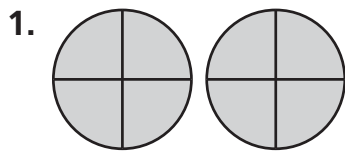**Write the fraction that names the point.**

1. point A ___

2. point B ___

3. point C ___

Lesson 8.6

Each shape is 1 whole. Write a fraction greater than 1 for the parts that are shaded.
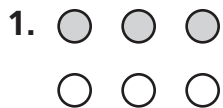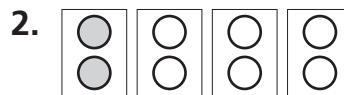
1.

$2 =$ ___

2.
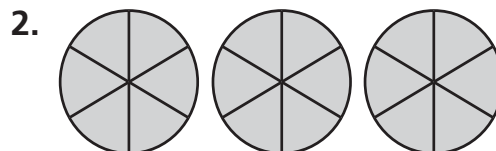
$3 =$ ___

Lesson 8.7

Write a fraction to name the shaded part of each group.

1.

2.

_____

_____

Lessons 8.8 – 8.9

Draw a quick picture to solve.

1. Charlotte has 12 T-shirts. One fourth of her T-shirts are green. How many of Charlotte's T-shirts are green?

2. Josh walks 18 dogs each week. Today, he is walking $\frac{1}{3}$ of the dogs. How many dogs is he walking today?

_____

_____