6th Grade Math Week 1

Dear Parent/Guardian,

During Week 1, we will review and support standards mastery of Ratios. Your child will work towards understanding the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. The table below lists this week's tasks and practice problems. Each student task ends with a 'Lesson Summary' section; there, your child can find targeted support for the lesson.

Additionally, students can access the HMH GoMath textbook through ClassLink. The site offers instructional support through links in the online textbook. By selecting embedded links, students can access the Personal Math Trainer for step-by-step examples, Math on the Spot for real-world connections and more examples, and Animated Math to help support conceptual understanding.

We also suggest that students have an experience with math each day. Practicing at home will make a HUGE difference in your child's school success! Make math part of your everyday routine. Choose online sites that match your child's interests. Online math games, when played repeatedly, can encourage strategic mathematical thinking, help develop computational fluency, and deepen their understanding of numbers.

Links for additional resources to support students at home are listed below:
https://www.adaptedmind.com/index.php
https://www.engageny.org/educational-activities-for-parents-and-students
https://www.khanacademy.org/resources/teacher-essentials
https://www.multiplication.com/games/all-games
https://www.prodigygame.com/

Week 1 At A Glance	
Day 1	Unit 2, Lesson 1 - Introducing Ratios and Ratio Language ☐ Student Tasks 1.1, 1.2, 1.3, and Lesson 1 Summary ☐ Practice Problems
Day 2	Unit 2, Lesson 2 - Representing Ratios with Diagrams ☐ Student Tasks 2.1, 2.2, 2.3, 2.4, and Lesson 2 Summary ☐ Practice Problems
Day 3	Unit 2, Lesson 3 - Recipes ☐ Student Tasks 3.1, 3.2, 3.3, and Lesson 3 Summary ☐ Practice Problems
Day 4	Unit 2, Lesson 4 - Color Mixtures ☐ Student Tasks 4.1, 4.2, 4.3, and Lesson 4 Summary ☐ Practice Problems
Day 5	Unit 2, Lesson 5 - Defining Equivalent Ratios ☐ Student Tasks 5.1, 5.2, 5.3, and Lesson 5 Summary ☐ Practice Problems

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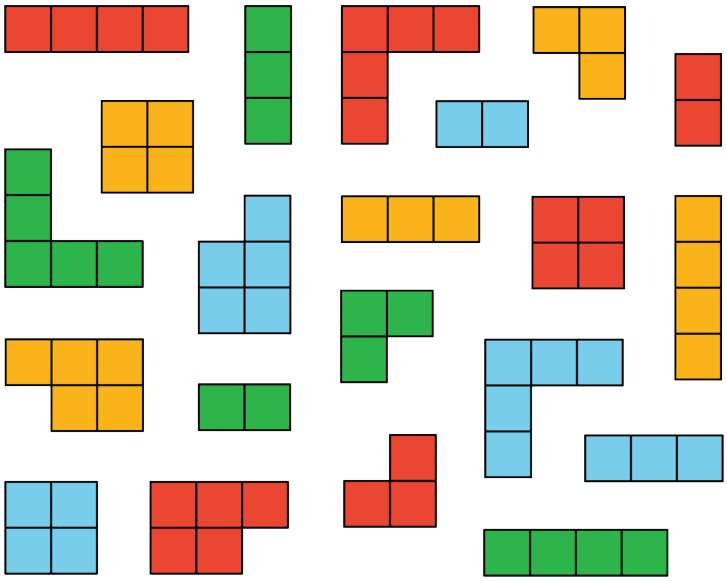
Unit 2, Lesson 1

Introducing Ratios and Ratio Language

Let's describe two quantities at the same time.

1.1 What Kind and How Many?



1. If you sorted this set by color, how many groups would you have?

2. If you sorted this set by area, how many groups would you have?

3. Think of a third way you could sort these figures. What categories would you use? How many groups would you have?

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1.2 The Teacher's Collection

1. Think of a way to sort your teacher's collection into two or three categories. Record your categories in the top row of the table and the amounts in the second row.

category name			
category amount			

Pause here so your teacher can review your work.

2. Write at least two sentences that describe **ratios** in the collection. Remember, there are many ways to write a ratio:
   - The ratio of *one category* to *another category* is _____ to _____.
   - The ratio of *one category* to *another category* is _____ : _____.
   - There are _____ of *one category* for every _____ of *another category*.

1.3 The Student's Collection

1. Sort your collection into three categories. You can experiment with different ways of arranging these categories. Then, count the items in each category, and record the information in the table.

category name			
category amount			

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2. Write at least two sentences that describe **ratios** in the collection. Remember, there are many ways to write a ratio:
   - The ratio of *one category* to *another category* is _____ to _____.
   - The ratio of *one category* to *another category* is _____ : _____.
   - There are _____ of *one category* for every _____ of *another category*.

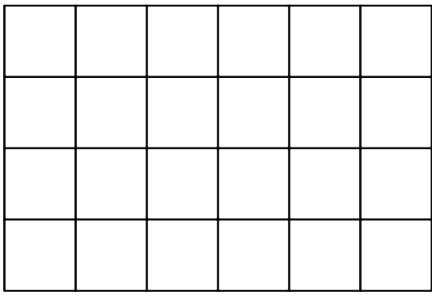
   Pause here so your teacher can review your sentences.

3. Make a visual display of your items that clearly shows one of your statements. Be prepared to share your display with the class.

Are you ready for more?

1. Use two colors to shade the rectangle so there are 2 square units of one color for every 1 square unit of the other color.
2. The rectangle you just colored has an area of 24 square units.

   Draw a different shape that does *not* have an area of 24 square units, but that can also be shaded with two colors in a $2:1$ ratio. Shade your new shape using two colors.



Lesson 1 Summary

A **ratio** is an association between two or more quantities. There are many ways to describe a situation in terms of ratios. For example, look at this collection:

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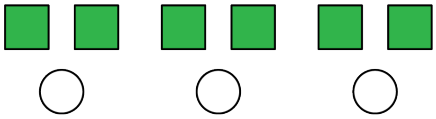
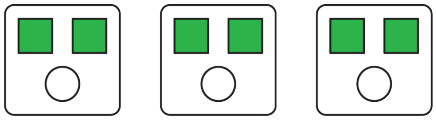


Here are some correct ways to describe the collection:

- The ratio of squares to circles is $6:3$.
- The ratio of circles to squares is 3 to 6.

Notice that the shapes can be arranged in equal groups, which allow us to describe the shapes using other numbers.



- There are 2 squares for every 1 circle.
- There is 1 circle for every 2 squares.

Glossary Terms

ratio

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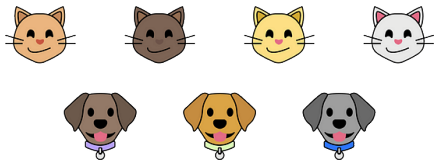
Unit 2, Lesson 1

Practice Problems

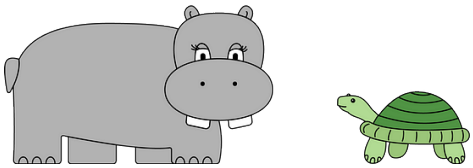
1. In a fruit basket there are 9 bananas, 4 apples, and 3 plums.
   a. The ratio of bananas to apples is _____ : _____.
   b. The ratio of plums to apples is _____ to _____.
   c. For every _____ apples, there are _____ plums.
   d. For every 3 bananas there is one _____.

2. Complete the sentences to describe this picture.



   a. The ratio of dogs to cats is _____.
   b. For every _____ dogs, there are _____ cats.

3. Write two different sentences that use ratios to describe the number of eyes and legs in this picture.



4. Choose an appropriate unit of measurement for each quantity.

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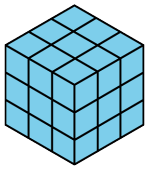
a. area of a rectangle
b. volume of a prism
c. side of a square
d. area of a square
e. volume of a cube

- cm
- cm^3
- cm^2

5. Find the volume and surface area of each prism.

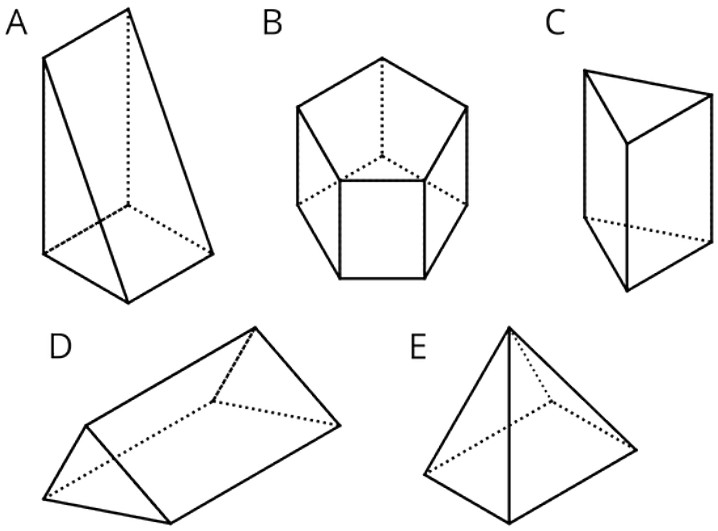
a. Prism A: 3 cm by 3 cm by 3 cm



b. Prism B: 5 cm by 5 cm by 1 cm

c. Compare the volumes of the prisms and then their surface areas. Does the prism with the greater volume also have the greater surface area?

6. Which figure is a triangular prism? Select **all** that apply.



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Unit 2, Lesson 2

Representing Ratios with Diagrams

Let's use diagrams to represent ratios.

2.1 Number Talk: Dividing by 4 and Multiplying by $\frac{1}{4}$

Find the value of each expression mentally.

$24 \div 4$

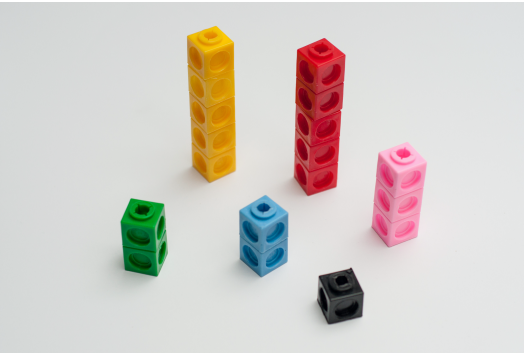
$\frac{1}{4} \cdot 24$

$24 \cdot \frac{1}{4}$

$5 \div 4$

2.2 A Collection of Snap Cubes

Here is a collection of snap cubes.



1. Choose two of the colors in the image, and draw a diagram showing the number of snap cubes for these two colors.

2. Trade papers with a partner. On their paper, write a sentence to describe a ratio shown in their diagram. Your partner will do the same for your diagram.

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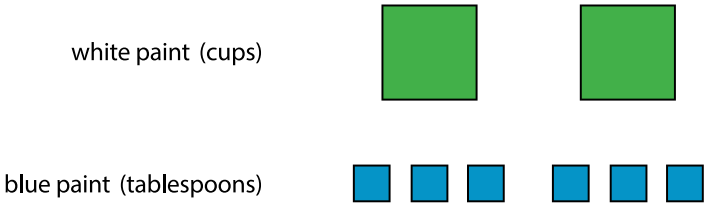
3. Return your partner's paper. Read the sentence written on your paper. If you disagree, explain your thinking.

2.3 Blue Paint and Art Paste

Elena mixed 2 cups of white paint with 6 tablespoons of blue paint.

Here is a diagram that represents this situation.



1. Discuss the statements that follow, and circle all those that correctly describe this situation. Make sure that both you and your partner agree with each circled answer.

   a. The ratio of cups of white paint to tablespoons of blue paint is $2 : 6$.

   b. For every cup of white paint, there are 2 tablespoons of blue paint.

   c. There is 1 cup of white paint for every 3 tablespoons of blue paint.

   d. There are 3 tablespoons of blue paint for every cup of white paint.

   e. For each tablespoon of blue paint, there are 3 cups of white paint.

   f. For every 6 tablespoons of blue paint, there are 2 cups of white paint.

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g. The ratio of tablespoons of blue paint to cups of white paint is 6 to 2.

2. Jada mixed 8 cups of flour with 2 pints of water to make paste for an art project.

   a. Draw a diagram that represents the situation.

   b. Write at least two sentences describing the ratio of flour and water.

2.4 Card Sort: Spaghetti Sauce

Your teacher will give you cards describing different recipes for spaghetti sauce. In the diagrams:

- a circle represents a cup of tomato sauce
- a square represents a tablespoon of oil
- a triangle represents a teaspoon of oregano

"Spaghetti Sauce" by eatquiche via Flickr. CC BY 2.0.

1. Take turns with your partner to match a sentence with a diagram.

   a. For each match that you find, explain to your partner how you know it's a match.

   b. For each match that your partner finds, listen carefully to their explanation. If you disagree, discuss your thinking and work to reach an agreement.

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2. After you and your partner have agreed on all of the matches, check your answers with the answer key. If there are any errors, discuss why and revise your matches.

3. There were two diagrams that each matched with two different sentences. Which were they?

   - Diagram _____ matched with both sentences _____ and _____.
   - Diagram _____ matched with both sentences _____ and _____.

4. Select one of the other diagrams and invent another sentence that could describe the ratio shown in the diagram.

Are you ready for more?

Create a diagram that represents any of the ratios in a recipe of your choice. Is it possible to include more than 2 ingredients in your diagram?

Lesson 2 Summary

Ratios can be represented using diagrams. The diagrams do not need to include realistic details. For example, a recipe for lemonade says, “Mix 2 scoops of lemonade powder with 6 cups of water.”

Instead of this:

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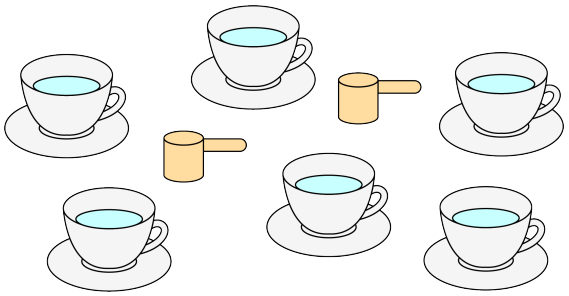
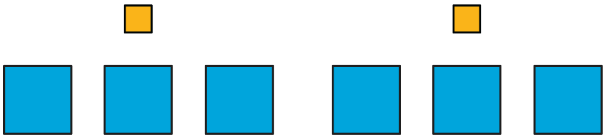


We can draw something like this:



This diagram shows that the ratio of cups of water to scoops of lemonade powder is 6 to 2.
We can also see that for every scoop of lemonade powder, there are 3 cups of water.

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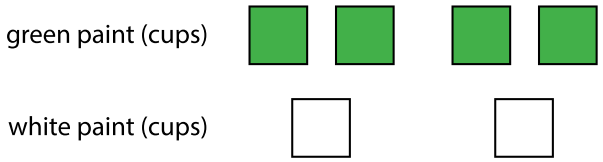
Unit 2, Lesson 2

Practice Problems

1. Here is a diagram that describes the cups of green and white paint in a mixture.



Select **all** the statements that accurately describe this diagram.

A. The ratio of cups of white paint to cups of green paint is 2 to 4.

B. For every cup of green paint, there are two cups of white paint.

C. The ratio of cups of green paint to cups of white paint is $4 : 2$.

D. For every cup of white paint, there are two cups of green paint.

E. The ratio of cups of green paint to cups of white paint is $2 : 4$.

2. To make a snack mix, combine 2 cups of raisins with 4 cups of pretzels and 6 cups of almonds.

   a. Create a diagram to represent the quantities of each ingredient in this recipe.

   b. Use your diagram to complete each sentence.

      i. The ratio of _____ to _____ to _____ is _____ : _____ : _____.

      ii. There are _____ cups of pretzels for every cup of raisins.

      iii. There are _____ cups of almonds for every cup of raisins.

3. a. A square is 3 inches by 3 inches. What is its area?

   b. A square has a side length of 5 feet. What is its area?

   c. The area of a square is 36 square centimeters. What is the length of each side of the square?

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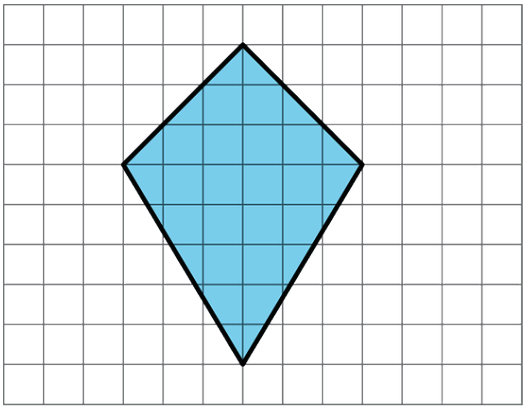
4. Find the area of this quadrilateral. Explain or show your strategy.



5. Complete each equation with a number that makes it true.

a. $\frac{1}{8} \cdot 8 =$ _____

b. $\frac{3}{8} \cdot 8 =$ _____

c. $\frac{1}{8} \cdot 7 =$ _____

d. $\frac{3}{8} \cdot 7 =$ _____

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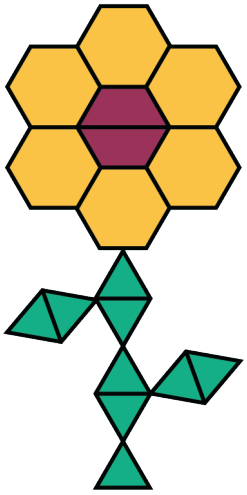
Unit 2, Lesson 3

Recipes

Let's explore how ratios affect the way a recipe tastes.

3.1 Flower Pattern

This flower is made up of yellow hexagons, red trapezoids, and green triangles.

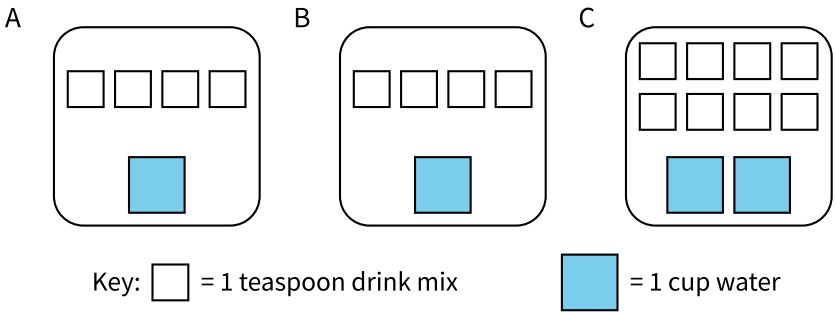


1. Write sentences to describe the ratios of the shapes that make up this pattern.

2. How many of each shape would be in two copies of this flower pattern?

3.2 Powdered Drink Mix

Here are diagrams representing three mixtures of powdered drink mix and water:



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1. How would the taste of Mixture A compare to the taste of Mixture B?

2. Use the diagrams to complete each statement:

   a. Mixture B uses _____ cups of water and _____ teaspoons of drink mix. The ratio of cups of water to teaspoons of drink mix in Mixture B is _____.

   b. Mixture C uses _____ cups of water and _____ teaspoons of drink mix. The ratio of cups of water to teaspoons of drink mix in Mixture C is _____.

3. How would the taste of Mixture B compare to the taste of Mixture C?

Are you ready for more?

Sports drinks use sodium (better known as salt) to help people replenish electrolytes. Here are the nutrition labels of two sports drinks.

A

Nutrition Facts
Serving Size 8 fl oz (240 mL)
Serving Per Container 4

Amount Per Serving
Calories 50

		% Daily Value*
Total Fat	0 g	0%
Sodium	110 mg	5%
Potassium	30 mg	1%
Total Carbohydrate	14 g	5%
Sugars	14g	
Protein	0 g	

% Daily Value are based on a 2,000 calorie diet.

B

Nutrition Facts
Serving Size 12 fl oz (355 mL)
Serving Per Container about 2.5

Amount Per Serving
Calories 80

		% Daily Value*
Total Fat	0 g	0%
Sodium	150 mg	6%
Potassium	35 mg	1%
Total Carbohydrate	21 g	7%
Sugars	20g	
Protein	0 g	

% Daily Value are based on a 2,000 calorie diet.

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1. Which of these drinks is saltier? Explain how you know.

2. If you wanted to make sure a sports drink was less salty than both of the ones given, what ratio of sodium to water would you use?

3.3 Batches of Cookies

A recipe for one batch of cookies calls for 5 cups of flour and 2 teaspoons of vanilla.

1. Draw a diagram that shows the amount of flour and vanilla needed for *two* batches of cookies.

2. How many batches can you make with 15 cups of flour and 6 teaspoons of vanilla? Indicate the additional batches by adding more ingredients to your diagram.

3. How much flour and vanilla would you need for 5 batches of cookies?

4. Whether the ratio of cups of flour to teaspoons of vanilla is $5 : 2$, $10 : 4$, or $15 : 6$, the recipes would make cookies that taste the same. We call these **equivalent ratios**.

   a. Find another ratio of cups of flour to teaspoons of vanilla that is equivalent to these ratios.

   b. How many batches can you make using this new ratio of ingredients?

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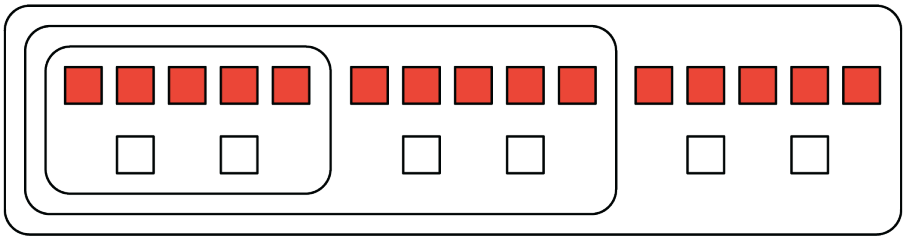
Lesson 3 Summary

A recipe for fizzy juice says, “Mix 5 cups of cranberry juice with 2 cups of soda water.”

To double this recipe, we would use 10 cups of cranberry juice with 4 cups of soda water.
To triple this recipe, we would use 15 cups of cranberry juice with 6 cups of soda water.

This diagram shows a single batch of the recipe, a double batch, and a triple batch:



We say that the ratios $5 : 2$, $10 : 4$, and $15 : 6$ are **equivalent**. Even though the amounts of each ingredient within a single, double, or triple batch are not the same, they would make fizzy juice that tastes the same.

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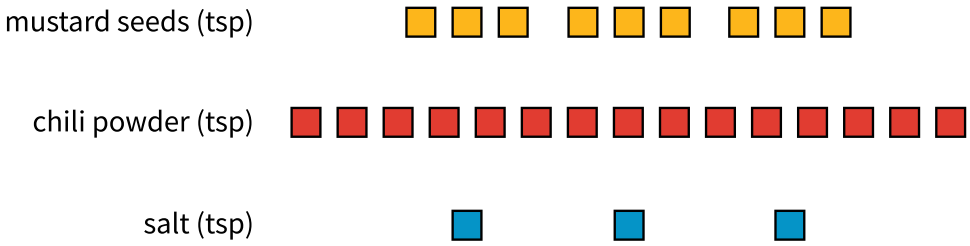
Unit 2, Lesson 3

Practice Problems

1. A recipe for 1 batch of spice mix says, “Combine 3 teaspoons of mustard seeds, 5 teaspoons of chili powder, and 1 teaspoon of salt.” How many batches are represented by the diagram? Explain or show your reasoning.



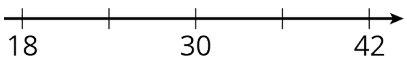
2. Priya makes chocolate milk by mixing 2 cups of milk and 5 tablespoons of cocoa powder. Draw a diagram that clearly represents two batches of her chocolate milk.

3. In a recipe for fizzy grape juice, the ratio of cups of sparkling water to cups of grape juice concentrate is 3 to 1.

   a. Find two more ratios of cups of sparkling water to cups of juice concentrate that would make a mixture that tastes the same as this recipe.

   b. Describe another mixture of sparkling water and grape juice that would taste different than this recipe.

4. Write the missing number under each tick mark on the number line.



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5. At the kennel, there are 6 dogs for every 5 cats.

   a. The ratio of dogs to cats is _____ to _____.

   b. The ratio of cats to dogs is _____ to _____.

   c. For every _____ dogs there are _____ cats.

   d. The ratio of cats to dogs is _____ : _____.

6. Elena has 80 unit cubes. What is the volume of the largest cube she can build with them?

7. Fill in the blanks to make each equation true.

   a. $3 \cdot \frac{1}{3} = \_\_\_\_\_$

   b. $10 \cdot \frac{1}{10} = \_\_\_\_\_$

   c. $19 \cdot \frac{1}{19} = \_\_\_\_\_$

   d. $a \cdot \frac{1}{a} = \_\_\_\_\_$
   (As long as a does not equal 0.)

   e. $5 \cdot \_\_\_\_\_ = 1$

   f. $17 \cdot \_\_\_\_\_ = 1$

   g. $b \cdot \_\_\_\_\_ = 1$

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Unit 2, Lesson 4

Color Mixtures

Let's see what color-mixing has to do with ratios.

4.1 Number Talk: Adjusting a Factor

Find the value of each product mentally.

$6 \cdot 15$

$12 \cdot 15$

$6 \cdot 45$

$13 \cdot 45$

4.2 Turning Green

Interactive digital version available

a.openup.org/ms-math/en/s/ccss-6-2-4-2

Your teacher mixed milliliters of blue water and milliliters of yellow water in the ratio $5 : 15$.

1. Doubling the original recipe:

   a. Draw a diagram to represent the amount of each color that you will combine to double your teacher's recipe.

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b. Use a marker to label an empty cup with the ratio of blue water to yellow water in this double batch.

c. Predict whether these amounts of blue and yellow will make the same shade of green as your teacher's mixture. Next, check your prediction by measuring those amounts and mixing them in the cup.

d. Is the ratio in your mixture equivalent to the ratio in your teacher's mixture? Explain your reasoning.

2. Tripling the original recipe:

a. Draw a diagram to represent triple your teacher's recipe.

b. Label an empty cup with the ratio of blue water to yellow water.

c. Predict whether these amounts will make the same shade of green. Next, check your prediction by mixing those amounts.

d. Is the ratio in your new mixture equivalent to the ratio in your teacher's mixture? Explain your reasoning.

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3. Next, invent your own recipe for a bluer shade of green water.

   a. Draw a diagram to represent the amount of each color you will combine.

   b. Label the final empty cup with the ratio of blue water to yellow water in this recipe.

   c. Test your recipe by mixing a batch in the cup. Does the mixture yield a bluer shade of green?

   d. Is the ratio you used in this recipe equivalent to the ratio in your teacher's mixture? Explain your reasoning.

Are you ready for more?

Someone has made a shade of green by using 17 ml of blue and 13 ml of yellow. They are sure it cannot be turned into the original shade of green by adding more blue or yellow. Either explain how more can be added to create the original green shade, or explain why this is impossible.

4.3 Perfect Purple Water

The recipe for Perfect Purple Water says, "Mix 8 ml of blue water with 3 ml of red water."

Jada mixes 24 ml of blue water with 9 ml of red water. Andre mixes 16 ml of blue water with 9 ml of red water.

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1. Which person will get a color mixture that is the same shade as Perfect Purple Water? Explain or show your reasoning.

2. Find another combination of blue water and red water that will also result in the same shade as Perfect Purple Water. Explain or show your reasoning.

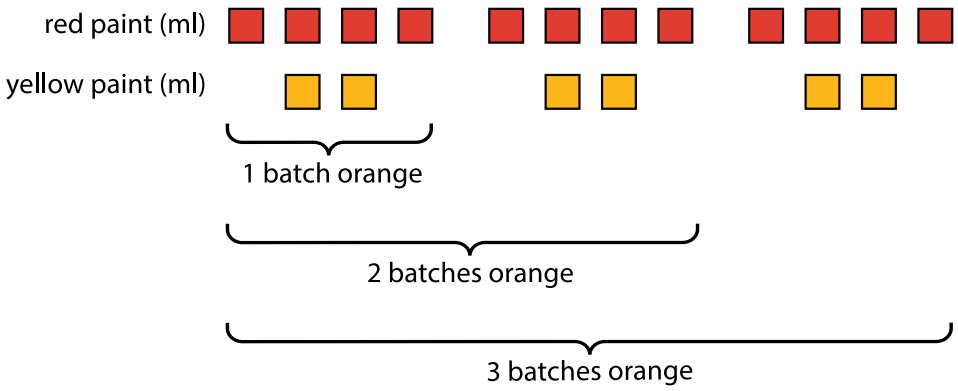
Lesson 4 Summary

When mixing colors, doubling or tripling the amount of each color will create the same shade of the mixed color. In fact, you can always multiply the amount of *each* color by *the same number* to create a different amount of the same mixed color.

For example, a batch of dark orange paint uses 4 ml of red paint and 2 ml of yellow paint.

- To make two batches of dark orange paint, we can mix 8 ml of red paint with 4 ml of yellow paint.
- To make three batches of dark orange paint, we can mix 12 ml of red paint with 6 ml of yellow paint.

Here is a diagram that represents 1, 2, and 3 batches of this recipe.



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We say that the ratios $4 : 2$, $8 : 4$, and $12 : 6$ are *equivalent* because they describe the same color mixture in different numbers of batches, and they make the same shade of orange.

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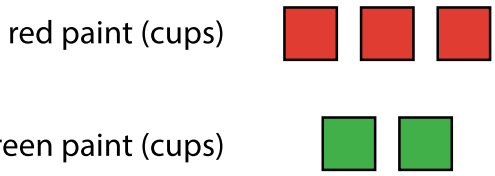
Unit 2, Lesson 4

Practice Problems

1. Here is a diagram showing a mixture of red paint and green paint needed for 1 batch of a particular shade of brown.



Add to the diagram so that it shows 3 batches of the same shade of brown paint.

2. Diego makes green paint by mixing 10 tablespoons of yellow paint and 2 tablespoons of blue paint. Which of these mixtures produce the same shade of green paint as Diego's mixture? Select **all** that apply.

   A. For every 5 tablespoons of blue paint, mix in 1 tablespoon of yellow paint.
   B. Mix tablespoons of blue paint and yellow paint in the ratio $1:5$.
   C. Mix tablespoons of yellow paint and blue paint in the ratio 15 to 3.
   D. Mix 11 tablespoons of yellow paint and 3 tablespoons of blue paint.

3. To make 1 batch of sky blue paint, Clare mixes 2 cups of blue paint with 1 gallon of white paint.

   a. Explain how Clare can make 2 batches of sky blue paint.
   b. Explain how to make a mixture that is a darker shade of blue than the sky blue.
   c. Explain how to make a mixture that is a lighter shade of blue than the sky blue.

4. A smoothie recipe calls for 3 cups of milk, 2 frozen bananas and 1 tablespoon of chocolate syrup.

   a. Create a diagram to represent the quantities of each ingredient in the recipe.

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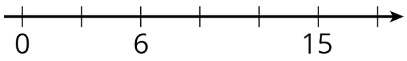
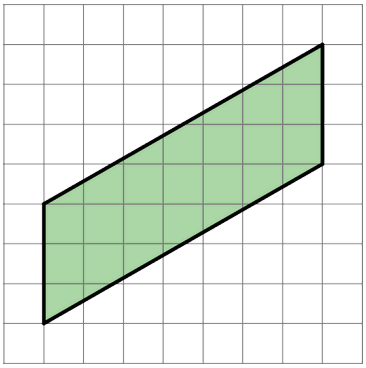
b. Write 3 different sentences that use a ratio to describe the recipe.

5. Write the missing number under each tick mark on the number line.



6. Find the area of the parallelogram. Show your reasoning.



7. Complete each equation with a number that makes it true.

a. $11 \cdot \frac{1}{4} =$ _____

b. $7 \cdot \frac{1}{4} =$ _____

c. $13 \cdot \frac{1}{27} =$ _____

d. $13 \cdot \frac{1}{99} =$ _____

e. $x \cdot \frac{1}{y} =$ _____
(As long as y does not equal 0.)

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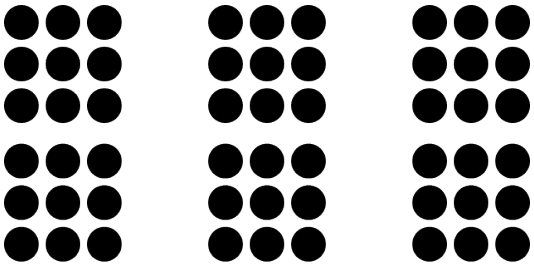
Unit 2, Lesson 5

Defining Equivalent Ratios

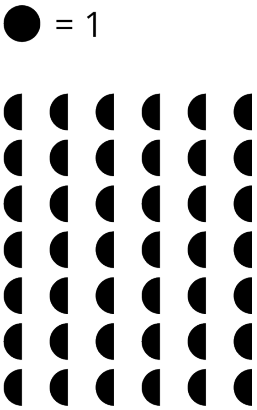
Let's investigate equivalent ratios some more.

5.1 Dots and Half Dots

Dot Pattern 1:



Dot Pattern 2:



5.2 Tuna Casserole

Here is a recipe for tuna casserole.

Ingredients

- 3 cups cooked elbow-shaped pasta
- 6 ounce can tuna, drained
- 10 ounce can cream of chicken soup
- 1 cup shredded cheddar cheese
- $1\frac{1}{2}$ cups French fried onions

"Sausage Egg Casserole" by RBerteig via Flickr. CC BY 2.0.

Instructions

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Combine the pasta, tuna, soup, and half of the cheese. Transfer into a 9-inch-by-18-inch baking dish. Put the remaining cheese on top. Bake 30 minutes at 350 degrees. During the last 5 minutes, add the French fried onions. Let sit for 10 minutes before serving.

1. What is the ratio of the ounces of soup to the cups of shredded cheese to the cups of pasta in one batch of casserole?

2. How much of each of these 3 ingredients would be needed to make:
   a. twice the amount of casserole?

   b. half the amount of casserole?

   c. five times the amount of casserole?

   d. one-fifth the amount of casserole?

3. What is the ratio of cups of pasta to ounces of tuna in one batch of casserole?

4. How many batches of casserole would you make if you used the following amounts of ingredients?
   a. 9 cups of pasta and 18 ounces of tuna?

   b. 36 ounces of tuna and 18 cups of pasta?

   c. 1 cup of pasta and 2 ounces of tuna?

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Are you ready for more?

The recipe says to use a 9 inch by 18 inch baking dish. Determine the length and width of a baking dish with the same height that could hold:

1. Twice the amount of casserole
2. Half the amount of casserole
3. Five times the amount of casserole
4. One-fifth the amount of casserole

5.3 What Are Equivalent Ratios?

The ratios $5 : 3$ and $10 : 6$ are **equivalent ratios**.

1. Is the ratio $15 : 12$ equivalent to these? Explain your reasoning.

2. Is the ratio $30 : 18$ equivalent to these? Explain your reasoning.

3. Give two more examples of ratios that are equivalent to $5 : 3$.

4. How do you know when ratios are equivalent and when they are *not* equivalent?

5. Write a definition of *equivalent ratios*.

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Pause here so your teacher can review your work and assign you a ratio to use for your visual display.

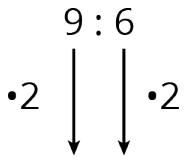
6. Create a visual display that includes:
   - the title "Equivalent Ratios"
   - your best definition of *equivalent ratios*
   - the ratio your teacher assigned to you
   - at least two examples of ratios that are equivalent to your assigned ratio
   - an explanation of how you know these examples are equivalent
   - at least one example of a ratio that is *not* equivalent to your assigned ratio
   - an explanation of how you know this example is *not* equivalent

   Be prepared to share your display with the class.

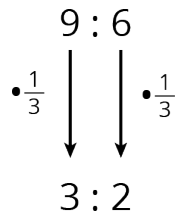
Lesson 5 Summary

All ratios that are **equivalent** to $a : b$ can be made by multiplying both a and b by the same number.

For example, the ratio $18 : 12$ is equivalent to $9 : 6$ because both 9 and 6 are multiplied by the same number: 2.



$3 : 2$ is also equivalent to $9 : 6$, because both 9 and 6 are multiplied by the same number: $\frac{1}{3}$.



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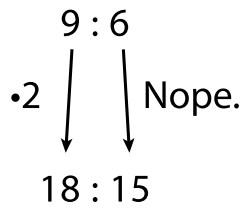
Is $18 : 15$ equivalent to $9 : 6$?

No, because 18 is $9 \cdot 2$, but 15 is *not* $6 \cdot 2$.



Glossary Terms

equivalent ratios

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Unit 2, Lesson 5

Practice Problems

1. Each of these is a pair of equivalent ratios. For each pair, explain why they are equivalent ratios or draw a diagram that shows why they are equivalent ratios.

   a. $4 : 5$ and $8 : 10$

   b. $18 : 3$ and $6 : 1$

   c. $2 : 7$ and $10{,}000 : 35{,}000$

2. Explain why $6 : 4$ and $18 : 8$ are not equivalent ratios.

3. Are the ratios $3 : 6$ and $6 : 3$ equivalent? Why or why not?

4. This diagram represents 3 batches of light yellow paint. Draw a diagram that represents 1 batch of the same shade of light yellow paint.

   white paint (cups) 

   yellow paint (cups) 

5. In the fruit bowl there are 6 bananas, 4 apples, and 3 oranges.

   a. For every 4 _____, there are 3 _____.

   b. The ratio of _____ to _____ is $6 : 3$.

   c. The ratio of _____ to _____ is 4 to 6.

   d. For every 1 orange, there are _____ bananas.

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6. Write fractions for points A and B on the number line.