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Focused Mathematics Intervention— Nivel 4 (Level 4)

This sample includes the following:

Teacher's Guide Cover (1 page)

Teacher's Guide Table of Contents (1 page)

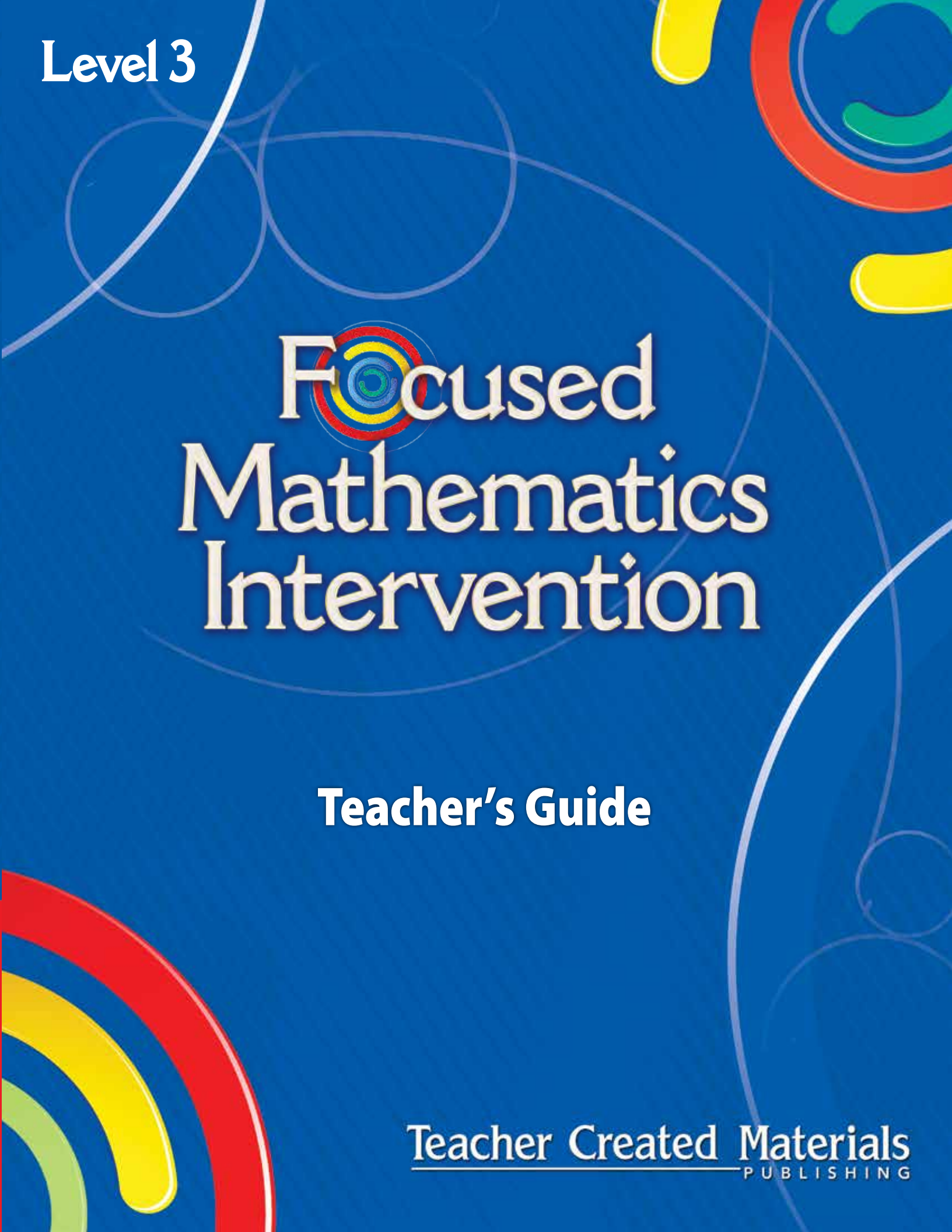
How to Use This Product (4 pages)

Lesson Plan (17 pages)

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Level 4

A target graphic with concentric circles in red, yellow, and blue, centered behind the letter 'F' in the word 'Focused'.

Focused Mathematics Intervention

Teacher's Guide

Teacher Created Materials
PUBLISHING

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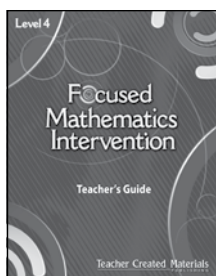
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Kit Components

Teacher's Guide

30 easy-to-use, standards-based lesson plans



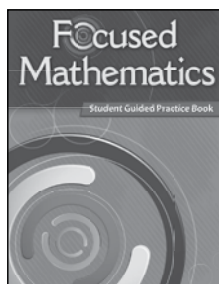
3 Digital Math Fluency Games

Focus on mathematical skills and strategies, and are on the Digital Resources USB Device



Student Guided Practice Book

Full-color student activities

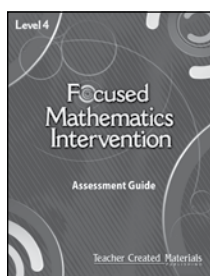


Digital Resources

- PDFs of all student materials, game sets, activity sheets, assessments, etc.
- PDFs of teacher resources
- Digital Math Fluency Games
- Electronic versions of the Pretest, Posttest, Performance Tasks, and reporting tools

Assessment Guide

Includes a pretest, posttest, performance tasks with assessments, and the answer key for the *Student Guided Practice Book*



Refocus Mini Lesson

Provide as PowerPoint® and PDF files



3 Math Fluency Game Sets

Include a game board, directions, an answer key, and game pieces



Getting Started

1. Prior to instruction, administer the Pretest. This assessment covers all the mathematics skills and objectives for this level of the program. It can be used to determine which concepts have already been mastered by each individual student, as well as which lesson's concepts still need to be taught.

Note: Use the Pretest Item Analysis (pretestanalysis.doc; pretestanalysis.pdf; pretestanalysis.xls) to help monitor which skills are the most difficult for students and need to be focused on.

2. Determine the most appropriate pacing plan for students. Use or modify the pacing plans located on pages 41–44 to best meet the needs of your students.

Name: _____ Date: _____

Pretest

1. Which of the following describes the equation $4 \times 7 = 28$?
 - A. There are 28 items on four \$4 bills.
 - B. There are 4 items on 28 \$1 bills.
 - C. There are 4 items on 28 \$4 bills.
 - D. There are 28 items on 4 \$1 bills.
2. Which situation can be modeled by the equation $8 \times 7 = 56$?
 - A. Jon has 56 dolls. Each doll has 8 legs.
 - B. Jon has 8 dolls. Each doll has 56 legs.
 - C. Jon has 8 dolls. Each doll has 7 legs.
 - D. Jon has 56 dolls. Each doll has 7 legs.
3. What operation can you use to solve this problem? A fishing boat costs \$30. That is three times as much as fishing net cost. How much does the fishing net cost?
 - A. $3 \times 30 = 90$
 - B. $3 \div 30 = 9$
 - C. $30 \div 3 = 10$
 - D. $30 \times 3 = 93$
4. The fourth grade are getting on an all-day field trip. They need 230 bottles of water. James bought five cases of 24 bottles each and Ming brought one case of 12 bottles each. How many more bottles of water are needed?
 - A. 4 bottles
 - B. 14 bottles
 - C. 34 bottles
 - D. 94 bottles

Pretest

Pretest Item Analysis

Directions: Tally responses to each item to indicate where students have missed questions. The table will automatically calculate the number of correct answers for each question. Do not mark questions you missed per student and do not mark the number of questions missed by the population.

Question	Student																										Number of Correct Answers
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
1																											
2																											
3																											
4																											

Pretest Item Analysis

Pacing Plans

When planning the pacing of a mathematics program, an educator uses data to determine students to which to focus. These pacing plans are created based on lessons of the students and the results of the Pretest. Teachers can use these to determine which students need the most instruction. The Pretest is designed to help determine which students need the most instruction. Teachers can use this information to focus which lessons to teach and which lessons to skip. These are pacing plans for the first three lessons. Teachers may wish to use these plans to determine the students in order to meet the needs of the students in their classrooms. The following are the pacing plans for the first three lessons of the program.

How to Interpret the Columns:

- 1. The column labeled "Lesson" lists the lesson number.
- 2. The column labeled "Page" lists the page number.
- 3. The column labeled "Status" lists the status of the lesson (e.g., "Not Taught", "Taught", "Not Taught").
- 4. The column labeled "Date" lists the date the lesson was taught.

How to Interpret the Rows:

- 1. The row labeled "Student" lists the student's name.
- 2. The row labeled "Lesson" lists the lesson number.
- 3. The row labeled "Page" lists the page number.
- 4. The row labeled "Status" lists the status of the lesson (e.g., "Not Taught", "Taught", "Not Taught").
- 5. The row labeled "Date" lists the date the lesson was taught.

How to Use the Pacing Plans:

- 1. Review the pacing plan for each student.
- 2. Determine which lessons the student has not mastered.
- 3. Determine which lessons the student has mastered.
- 4. Determine which lessons the student needs to be taught.

Pacing Plans

Option 1: Sample One-Week Pacing Plan

3 lessons, 5 days week

The pacing plan for this program can be used for a one-week intervention program.

Week	Day 1	Day 2	Day 3	Day 4	Day 5
1	Lesson 1: Multiplication (pages 10-12)	Lesson 2: Division (pages 13-15)	Lesson 3: Fractions (pages 16-18)	Lesson 4: Decimals (pages 19-21)	Lesson 5: Review (pages 22-24)

Pacing Plans

Option 2: Sample Four-Week Pacing Plan

3 lessons, 5 days week

The pacing plan for this program can be used for a four-week intervention program.

Week	Day 1	Day 2	Day 3	Day 4	Day 5
1	Lesson 1: Multiplication (pages 10-12)	Lesson 2: Division (pages 13-15)	Lesson 3: Fractions (pages 16-18)	Lesson 4: Decimals (pages 19-21)	Lesson 5: Review (pages 22-24)
2	Lesson 6: Geometry (pages 25-27)	Lesson 7: Measurement (pages 28-30)	Lesson 8: Data (pages 31-33)	Lesson 9: Probability (pages 34-36)	Lesson 10: Review (pages 37-39)
3	Lesson 11: Multiplication (pages 40-42)	Lesson 12: Division (pages 43-45)	Lesson 13: Fractions (pages 46-48)	Lesson 14: Decimals (pages 49-51)	Lesson 15: Review (pages 52-54)
4	Lesson 16: Geometry (pages 55-57)	Lesson 17: Measurement (pages 58-60)	Lesson 18: Data (pages 61-63)	Lesson 19: Probability (pages 64-66)	Lesson 20: Review (pages 67-69)

Pacing Plans

Option 3: Sample Six-Week Pacing Plan

3 lessons, 5 days week

The pacing plan for this program can be used for a six-week intervention program.

Week	Day 1	Day 2	Day 3	Day 4	Day 5
1	Lesson 1: Multiplication (pages 10-12)	Lesson 2: Division (pages 13-15)	Lesson 3: Fractions (pages 16-18)	Lesson 4: Decimals (pages 19-21)	Lesson 5: Review (pages 22-24)
2	Lesson 6: Geometry (pages 25-27)	Lesson 7: Measurement (pages 28-30)	Lesson 8: Data (pages 31-33)	Lesson 9: Probability (pages 34-36)	Lesson 10: Review (pages 37-39)
3	Lesson 11: Multiplication (pages 40-42)	Lesson 12: Division (pages 43-45)	Lesson 13: Fractions (pages 46-48)	Lesson 14: Decimals (pages 49-51)	Lesson 15: Review (pages 52-54)
4	Lesson 16: Geometry (pages 55-57)	Lesson 17: Measurement (pages 58-60)	Lesson 18: Data (pages 61-63)	Lesson 19: Probability (pages 64-66)	Lesson 20: Review (pages 67-69)
5	Lesson 21: Multiplication (pages 70-72)	Lesson 22: Division (pages 73-75)	Lesson 23: Fractions (pages 76-78)	Lesson 24: Decimals (pages 79-81)	Lesson 25: Review (pages 82-84)
6	Lesson 26: Geometry (pages 85-87)	Lesson 27: Measurement (pages 88-90)	Lesson 28: Data (pages 91-93)	Lesson 29: Probability (pages 94-96)	Lesson 30: Review (pages 97-99)

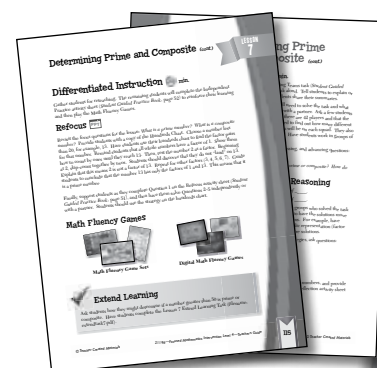
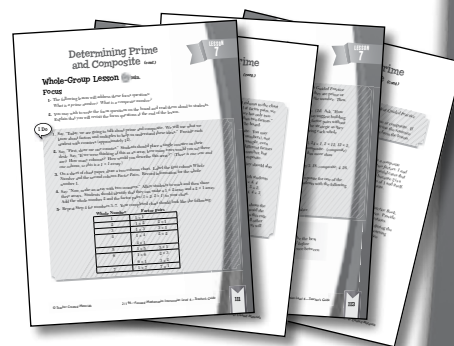
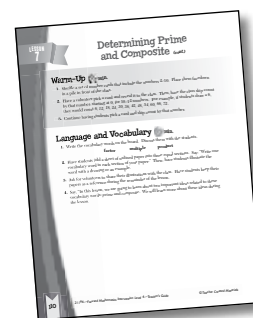
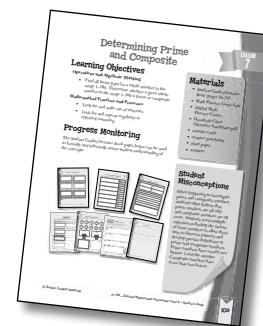


Teaching a Lesson

Teacher's Guide

Each 8-page lesson is organized in a consistent format for ease of use. Teachers may choose to complete some or all of the lesson activities to best meet the needs of their students. Lesson materials can be utilized flexibly in a variety of settings. For example, modeling with a small group, using printed materials with a document camera, or using PDF materials on a digital platform, such as an interactive whiteboard. Each lesson includes:

- an overview page with key information for planning
 - key mathematics content standards covered
 - key mathematical practices and processes addressed
 - an overview providing teacher background or student misconceptions
-
- a Warm-Up activity to build students' recall of important mathematical concepts
 - a whole-class Language and Vocabulary activity
 - time markers to indicate the approximate time for instruction
-
- a whole-class section focusing on the key concept/skill being taught
 - use of the gradual release of responsibility model in the Whole-Group lesson section
-
- differentiation strategies to support and extend learning with the Refocus lesson and Extend Learning activity
 - math fluency games that motivate students to develop and reinforce mastery of basic skills
 - a Math in the Real World concept task activity

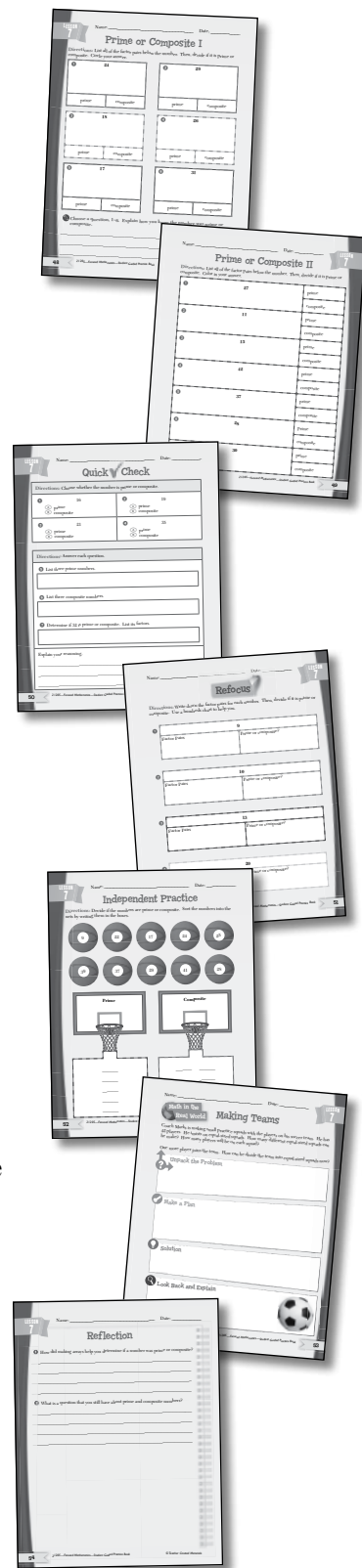


Teaching a Lesson *(cont.)*

Student Guided Practice Book

Each lesson in the *Teacher's Guide* has seven corresponding student pages in the *Student Guided Practice Book*:

- a We Do activity to support the gradual release of responsibility model
- a You Do activity to facilitate independent practice
- a Quick Check to easily monitor students' progress
- a Refocus activity for students who need more instruction
- an Independent Practice page to reinforce mathematical content taught in the lesson
- a Math in the Real World concept task for students to apply the math concept in a real-life scenario
- a Reflection page for students to share their mathematical understanding



Comparing Fractions: Common Denominators

Learning Objectives

Numbers and Operations—Fractions

- Compare two fractions with different numerators and different denominators by creating common denominators. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions; e.g., by using a visual fraction model.

Mathematical Practices and Processes

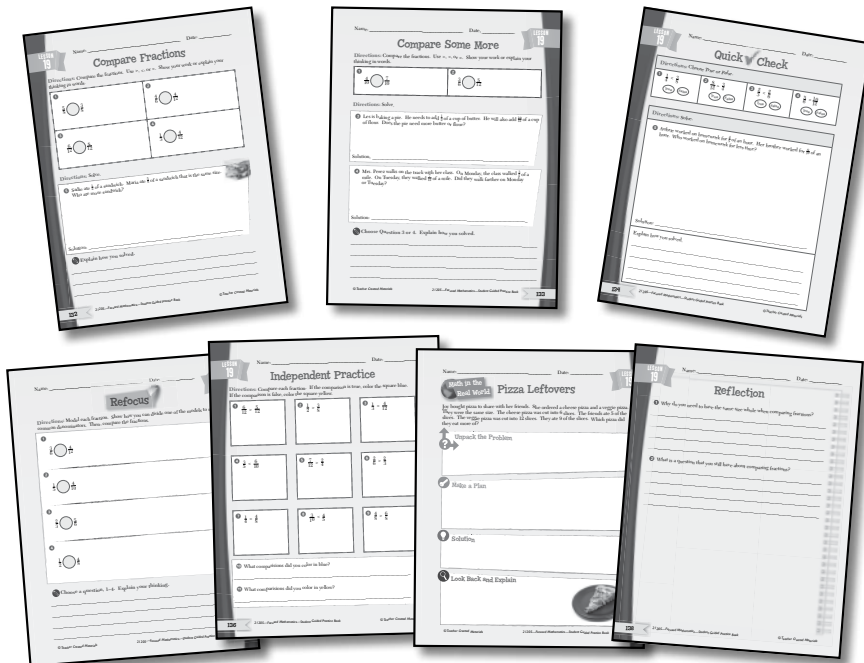
- Reason abstractly and quantitatively.
- Model with mathematics.
- Look for and express regularity in repeated reasoning.

Materials

- *Student Guided Practice Book* (pages 132–138)
- Math Fluency Game Sets
- Digital Math Fluency Games
- chart paper
- markers
- index cards
- sentence strips
- yellow and blue crayons or colored pencils

Progress Monitoring

The *Student Guided Practice Book* pages below can be used to formally and informally assess student understanding of the concepts.



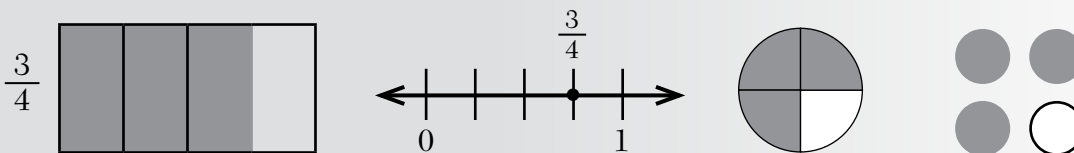
Teacher Background

To successfully compare fractions, students need to have a strong understanding of the meaning of the numerator and denominator in a fraction. They must recognize that the denominator is the number of equal parts the whole is divided into and the numerator is the number of equal parts being represented. To create fractions with common denominators, students should also be comfortable with generating equivalent fractions (see Lesson 18).

Comparing Fractions: Common Denominators *(cont.)*

Warm-Up (10) min.

1. Put students into groups of two or three. Provide each group with a sheet of chart paper.
2. Explain that each group will choose a fraction and write it at the top of their chart paper. Then, they will represent the fraction using a method of their choice. For example, students could plot the fraction on a number line, create an area model, or represent parts of a group.



3. Allow groups several minutes to work. Then, bring the class back together. Have groups share their representations. Ask students to explain their representations. For example: *Why did you divide the number line this way? How did you know how many parts on the model to shade?*

Language and Vocabulary (10) min.

1. Write the following vocabulary terms on the board:

compare	numerator	denominator	fraction
greater than	less than	equal	

2. Create two sets of index cards. One set should contain each word. The other set should contain the definition of each word.
3. Put students into seven groups. Give each group a definition card. Say, “Today, we are going to play I Have, Who Has. I have a set of index cards with each of the vocabulary words on it. I will pick a card and say, ‘I have...’ and read the word. Then, I will say, ‘Who has the definition?’ You will look at your definition and see if you think it matches my word card. If you think your group has the definition, raise your hands.”
4. Play I Have, Who Has with students. Choose one word card at a time, and have students identify who has the definition.

Comparing Fractions: Common Denominators *(cont.)*

Whole-Group Lesson (40) min.

Focus

1. The following lesson will address this focus question:
What strategies can you use to compare fractions?
2. You may wish to write the focus question on the board and read it aloud to students. Explain that you will revisit the focus question at the end of the lesson.

I Do

1. Say, “Today, we are going to compare fractions.” Write $\frac{2}{5}$ and $\frac{4}{5}$ on the board. Say, “Let’s compare these fractions using an area model. How could we do this?” Students should identify that they can draw two equal rectangles, divide them into five equal parts, and then shade two parts for $\frac{2}{5}$ and four parts for $\frac{4}{5}$. Draw area models to represent $\frac{2}{5}$ and $\frac{4}{5}$ on the board.



2. Ask, “How do we know which fraction is greater?” Students should recognize that the fraction with more of the area shaded is greater ($\frac{4}{5}$). Review comparison symbols with students ($>$, $<$, and $=$), and write an inequality to compare $\frac{2}{5}$ and $\frac{4}{5}$ (e.g., $\frac{2}{5} < \frac{4}{5}$; $\frac{4}{5} > \frac{2}{5}$). Remind students that they can only compare fractions when they refer to the same whole. For example, each of the area models is the same size, so the comparison is valid.
3. Ask, “What do you notice about the size of the parts in these fraction models?” Students should recognize that the size of the parts is the same because the denominator is the same. Ask, “Which fraction represents more equal parts?” ($\frac{4}{5}$) Say, “It makes sense that $\frac{4}{5}$ is greater. In $\frac{4}{5}$, we have four equal parts. In $\frac{2}{5}$, we have only two equal parts. Let’s see if we can find this pattern when we compare more fractions with the same denominator.

Language Support

Every time you write an inequality, have students read it aloud with you to reinforce the vocabulary and meaning of the symbols.

Comparing Fractions: Common Denominators *(cont.)*

Whole-Group Lesson *(cont.)*

I Do
(cont.)

4. Repeat Steps 1–2 to compare the following fractions: $\frac{5}{6}$ and $\frac{2}{6}$ ($\frac{5}{6} > \frac{2}{6}$); $\frac{3}{10}$ and $\frac{8}{10}$ ($\frac{3}{10} < \frac{8}{10}$); and $\frac{5}{12}$ and $\frac{10}{12}$ ($\frac{5}{12} < \frac{10}{12}$). By the last set of fractions, encourage students to reason about the fractions without the visual model. They should recognize that $\frac{10}{12}$ is greater than $\frac{5}{12}$ because the equal parts are the same size, and there are more parts represented in $\frac{10}{12}$ than in $\frac{5}{12}$.
5. Say, “This method works when we have fractions with the same denominator. But, what if the fractions did not have the same denominator?” Write $\frac{2}{4}$ and $\frac{3}{8}$ on the board. Ask students to identify how they could compare these fractions. Students may suggest creating area models. Create area models on the board.



6. Say, “Making a model is a good strategy. But what if we could make the fractions have the same denominators? Then, we could just compare the numerators. Is there a way that we could make these fractions share a common denominator?” Students should recognize that they can rewrite $\frac{2}{4}$ as an equivalent fraction with a denominator of 8. Ask, “How can we do this?” Work together with students to multiply the numerator and denominator by 2 to generate the equivalent fraction $\frac{4}{8}$. Ask, “How can we compare the fractions now?” Students should recognize that now that the denominators are the same, they can simply compare the numerators. Four is greater than three, so $\frac{4}{8}$ is greater than $\frac{3}{8}$. Record $\frac{2}{4} > \frac{3}{8}$ on the board.
7. Repeat Step 6 to compare fractions by making common denominators:

$$\frac{2}{6} \text{ and } \frac{2}{3} \left(\frac{2 \times 2}{3 \times 2} = \frac{4}{6}; \frac{2}{6} \text{ is less than } \frac{4}{6}; \frac{2}{6} < \frac{2}{3} \right)$$

$$\frac{4}{5} \text{ and } \frac{6}{10} \left(\frac{4 \times 2}{5 \times 2} = \frac{8}{10}; \frac{8}{10} \text{ is greater than } \frac{6}{10}; \frac{4}{5} > \frac{6}{10} \right)$$

$$\frac{1}{2} \text{ and } \frac{4}{12} \left(\frac{1 \times 6}{2 \times 6} = \frac{6}{12}; \frac{6}{12} \text{ is greater than } \frac{4}{12}; \frac{1}{2} > \frac{4}{12} \right)$$

Comparing Fractions: Common Denominators (cont.)

Whole-Group Lesson (cont.)

We Do

1. Refer students to the Compare Fractions activity sheet (*Student Guided Practice Book*, page 132). Say, “Let’s compare more fractions.” Copy Question 1 onto the board: $\frac{5}{8}$ $\frac{3}{8}$.
2. Ask, “How can we compare these fractions?” Students should recognize that the fractions have the same denominator. Allow them to draw a model to visually compare the fractions, if needed. If they can simply reason about the numerators, they can also explain their thinking in words (e.g., *The denominators are the same, so I know the parts are the same size. Because $\frac{5}{8}$ is greater, it has more parts than $\frac{3}{8}$*). Ensure that students record the correct symbol to compare the fractions. ($\frac{5}{8} > \frac{3}{8}$)
3. Copy Question 2 onto the board: $\frac{4}{6}$ $\frac{4}{12}$. Ask, “How can we compare these fractions?” Students should recognize that they can draw area models or make common denominators. Ask, “How can we make common denominators?” Students should identify that $\frac{4}{6}$ can be multiplied by $\frac{2}{2}$ to make $\frac{8}{12}$. Allow them to show these steps on the activity sheet as you do so on the board. Then, they should compare the numerators. Students should conclude that $\frac{8}{12}$ is greater than $\frac{4}{12}$, so therefore $\frac{4}{6}$ is greater than $\frac{4}{12}$. ($\frac{4}{6} > \frac{4}{12}$)
4. Use these steps to solve Questions 3–4 with students. Then, direct students to Question 5. Ask, “How can we find out if Maria or Sadie ate more sandwich?” Students should recognize that they need to compare the fractions. Allow them to solve with a partner and share their solutions with the class. Students should have created common denominators ($\frac{1}{2} \times \frac{4}{4} = \frac{4}{8}$) and compared $\frac{4}{8}$ and $\frac{5}{8}$, determining that $\frac{5}{8}$ is greater. This means that Maria ate more. Make sure students understand that the comparison is only valid because the sandwiches are the same size.
5. Students will complete the activity sheet by explaining how they solved. To help students explain their reasoning, provide them with the following sentence frames:
 - *To compare the fractions, I _____.*
 - *_____ is greater than/less than _____. So _____ ate more sandwich.*

Comparing Fractions: Common Denominators *(cont.)*

Whole-Group Lesson *(cont.)*

You Do

1. Refer students to the Compare Some More activity sheet (*Student Guided Practice Book*, page 133). Provide the sentence frames from Step 5 of the We Do section to help students explain how they solved.
2. Have students share their solutions. If students have difficulty explaining their reasoning, remind them to use the sentence frames and vocabulary terms.

Closing the Whole-Group Lesson

Revisit the focus question for the lesson: *What strategies can you use to compare fractions?* Students should identify strategies used in the lesson. Make sure to recognize when certain strategies should be used. For example, when students have two fractions with the same denominator, they can model them with area models, or reason about the number of parts in the fractions (the numerators). When the denominators are the same, they know that the size of the parts is the same, so the fraction with more parts (i.e., the greater numerator) is greater. When students have two fractions with different denominators, they can model these with area models and compare. Or they can try to rewrite the fractions to have a common denominator. Then, they can compare the numerators directly to see which is greater or less. Make sure students recognize that they can only compare numerators in this way when the fractions have the same denominators.

Progress Monitoring 5 min.

1. Have students complete the Quick Check activity sheet (*Student Guided Practice Book*, page 134) to gauge student progress toward mastery of the Learning Objectives. Provide students with scratch paper to show their work on the selected response questions.
2. Based on the results of the Quick Check activity sheet and your observations during the lesson, identify students who may benefit from additional instruction in the Learning Objectives. These students will be placed into a small group for reteaching. See instructions on the following page.

Comparing Fractions: Common Denominators *(cont.)*

Differentiated Instruction (20) min.

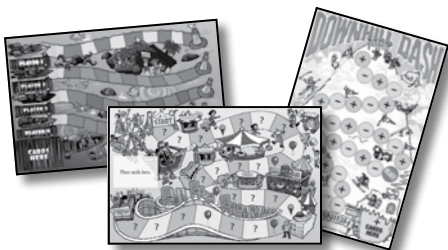
Gather students for reteaching. The remaining students will complete the Independent Practice activity sheet (*Student Guided Practice Book*, page 136) to reinforce their learning and then play the Math Fluency Games.

Refocus

Revisit the focus question for the lesson: *What strategies can you use to compare fractions?* Provide students with sentence strips. Write the following on the board: *Compare $\frac{3}{4}$ and $\frac{1}{2}$.* Have students use sentence strips to model each fraction. Ask guiding questions (e.g., *How many equal parts should you fold the paper into?* *How many equal parts should you shade?*) Then, have students compare the models to determine which fraction is greater. ($\frac{3}{4}$) Show students how to fold the $\frac{1}{2}$ strip in half to create fourths. Ask students what fraction is shown now. ($\frac{2}{4}$) Write $\frac{2}{4}$ on the board, and ask students how they could compare the fractions. They should conclude that because both models are in fourths, it is easier to see that $\frac{3}{4}$ is greater than $\frac{2}{4}$. Repeat with the fractions $\frac{5}{8}$ and $\frac{3}{4}$. ($\frac{3}{4}$ is greater) Then, fold the $\frac{3}{4}$ model in half to see the equivalent fraction. ($\frac{6}{8}$)

Support students as they complete Question 1 on the Refocus activity sheet (*Student Guided Practice Book*, page 135). Have them solve Questions 2–4 independently or with a partner. Students will draw visual models to compare two fractions, and then divide one of the models to create models with common denominators.

Math Fluency Games



Math Fluency Game Sets



Digital Math Fluency Games

Extend Learning

Have students complete the Lesson 19 Extend Learning Task (filename: extendtask19.pdf). Students will write a compare word problem given two fractions. They will trade papers with a partner and solve each other's word problems. Ensure that students write problems in which the whole is the same size in both fractions.

Comparing Fractions: Common Denominators *(cont.)*

Math in the Real World (30) min.

1. Refer students to the Math in the Real World: Pizza Leftovers task (*Student Guided Practice Book*, page 137). Have a student read the task aloud. Tell students to explain or summarize the task to their partner. Have a few students share their summaries.
2. Ask students to think about what information they will need to solve the task and what the task is asking them to do. Then, have them share with a partner. Ask a few students to share aloud. Students should identify that they know the pizzas are the same size and they know how many slices each pizza was cut into. They also know how many slices of each pizza were eaten. Students need to find out which pizza had more eaten. Have students work in groups of two or three to complete the task.
3. As students are working, circulate and ask focusing, assessing, and advancing questions:
 - *What fraction can you use to show the amount of the cheese/veggie pizza that was eaten?*
 - *How can you compare the fractions?*
 - *Why is it important that the pizzas are the same size?*

Sentence Frames for Explaining Reasoning

- *The fraction of the cheese/veggie pizza eaten is _____.*
 - *I can compare the fractions by _____.*
 - *_____ is the larger fraction. This means _____.*
4. Observe how students are solving the task, and choose a few groups who solved the task in different ways to share their solutions and reasoning. Try to have the solutions move from concrete representations to more abstract representations. For example, have students share solutions using visual representations (creating area models to compare the fractions), then more abstract strategies such as creating a common denominator and comparing the numerators. Make sure students explain their reasoning as they share solutions.
 5. As groups are sharing their solution paths, reasoning, and strategies, ask questions:
 - *Do you agree or disagree with the solution path and reasoning? Why?*
 - *Which solution path makes the most sense to you? Why?*

Lesson Reflection (5) min.

Have students summarize their learning about comparing fractions, and provide feedback on any questions they still have about the content on the Reflection activity sheet (*Student Guided Practice Book*, page 138).

Compara fracciones

Instrucciones: Compara las fracciones. Usa $>$, $<$ o $=$. Muestra tu trabajo o explica tu razonamiento en palabras.

<p>1</p> $\frac{5}{8} \bigcirc \frac{3}{8}$	<p>2</p> $\frac{4}{6} \bigcirc \frac{4}{12}$
<p>3</p> $\frac{6}{12} \bigcirc \frac{8}{12}$	<p>4</p> $\frac{1}{3} \bigcirc \frac{4}{12}$

Instrucciones: Resuelve.

- 5 Sadie comió $\frac{1}{2}$ de un sándwich. María comió $\frac{5}{8}$ de un sándwich que tenía el mismo tamaño. ¿Quién comió más sándwich?



Solución: _____

 Explica cómo lo resolviste.

Compara más fracciones

Instrucciones: Compara las fracciones. Usa $>$, $<$ o $=$. Muestra tu trabajo o explica tu razonamiento en palabras.

1

$$\frac{4}{10} \bigcirc \frac{7}{10}$$

2

$$\frac{3}{6} \bigcirc \frac{5}{12}$$

Instrucciones: Resuelve.

- 3 Laura hornea un pastel. Debe agregarle $\frac{1}{2}$ de una taza de mantequilla. Debe agregarle también $\frac{10}{12}$ de una taza de harina. ¿El pastel necesita más mantequilla o harina?

Solución: _____

- 4 La Sra. Pérez camina por un sendero con su clase. El lunes, la clase caminó $\frac{3}{4}$ de una milla. El martes, caminaron $\frac{7}{12}$ de una milla. ¿Caminaron más el lunes o el martes?

Solución: _____



Elige la Pregunta 3 o la 4. Explica cómo la resolviste.

Repaso rápido

Instrucciones: Elige Verdadero o Falso.

1 $\frac{1}{4} < \frac{3}{8}$

Verdadero

Falso

2 $\frac{8}{12} > \frac{3}{4}$

Verdadero

Falso

3 $\frac{2}{3} < \frac{2}{6}$

Verdadero

Falso

4 $\frac{5}{6} = \frac{10}{12}$

Verdadero

Falso

Instrucciones: Resuelve.

- 5 Aubrie trabajó en su tarea durante $\frac{4}{5}$ de una hora. Su hermano trabajó durante $\frac{9}{10}$ de una hora. ¿Quién es el que menos tiempo trabajó en la tarea?

Solución: _____

Explica cómo lo resolviste.

Concéntrate

Instrucciones: Modela las fracciones. Demuestra cómo puedes dividir uno de los modelos para crear denominadores comunes. Después, compara las fracciones.

1

$$\frac{3}{6} \quad \bigcirc \quad \frac{4}{12}$$

2

$$\frac{1}{5} \quad \bigcirc \quad \frac{4}{10}$$

3

$$\frac{2}{3} \quad \bigcirc \quad \frac{5}{6}$$

4

$$\frac{1}{2} \quad \bigcirc \quad \frac{4}{8}$$



Elige una pregunta de 1 a 4. Explica tu razonamiento.

Práctica independiente

Instrucciones: Compara las fracciones. Si la comparación es verdadera, colorea el cuadrado de azul. Si la comparación es falsa, colorea el cuadrado de amarillo.

1 $\frac{6}{12} > \frac{5}{12}$

2 $\frac{1}{2} > \frac{3}{8}$

3 $\frac{1}{3} = \frac{4}{12}$

4 $\frac{3}{5} < \frac{6}{10}$

5 $\frac{7}{12} > \frac{2}{4}$

6 $\frac{2}{6} > \frac{2}{3}$

7 $\frac{1}{4} = \frac{4}{8}$

8 $\frac{3}{10} < \frac{4}{5}$

9 $\frac{4}{8} > \frac{6}{8}$

10 ¿Qué comparaciones coloreaste de azul?

11 ¿Qué comparaciones coloreaste de amarillo?



Sobras de pizza

Joy compró pizza para compartir con sus amigos. Pidió una pizza de queso y una vegetariana. Las dos tenían el mismo tamaño. Dividieron la pizza de queso en 6 porciones. El grupo de amigos comió 5 porciones. Dividieron la pizza vegetariana en 12 porciones. Comieron 9 porciones. ¿De cuál pizza comieron más?



Desarma el problema



Prepara un plan



Solución



Repasa y explica



Observaciones

1 ¿Por qué necesitas tener el entero del mismo tamaño al comparar fracciones?

2 ¿Qué es una pregunta que todavía tienes sobre la comparación de fracciones?

Evaluación diagnóstica

1. ¿Cuál de los siguientes describe esta ecuación:

$$4 \times 9 = 36?$$

- (A) Nueve veces la cantidad de cuatro es 36.
- (B) Nueve más que cuatro es 36.
- (C) Treinta y seis es nueve veces menos que cuatro.
- (D) Nueve veces la cantidad de 36 es cuatro.

3. ¿Qué ecuación puedes usar para resolver este problema?

Una caña de pescar cuesta \$30. Es tres veces más que una red de pescar. ¿Cuánto cuesta la red de pescar?

- (A) $30 \times 3 = \$90$
- (B) $5 \times 6 = \$30$
- (C) $30 \div 3 = \$10$
- (D) $30 \div 10 = \$4$

2. ¿Qué situación puede modelarse con la ecuación

$$8 \times 7 = 56?$$

- (A) Jan tiene 8 muñecas. Sarah tiene 7.
- (B) Jan tiene 8 muñecas. Sarah tiene 7 veces menos muñecas que Jan.
- (C) Sarah tiene 8 muñecas. Jan tiene 7 muñecas más que Sarah.
- (D) Jan tiene 8 muñecas. Sarah tiene 7 veces más muñecas que Jan.

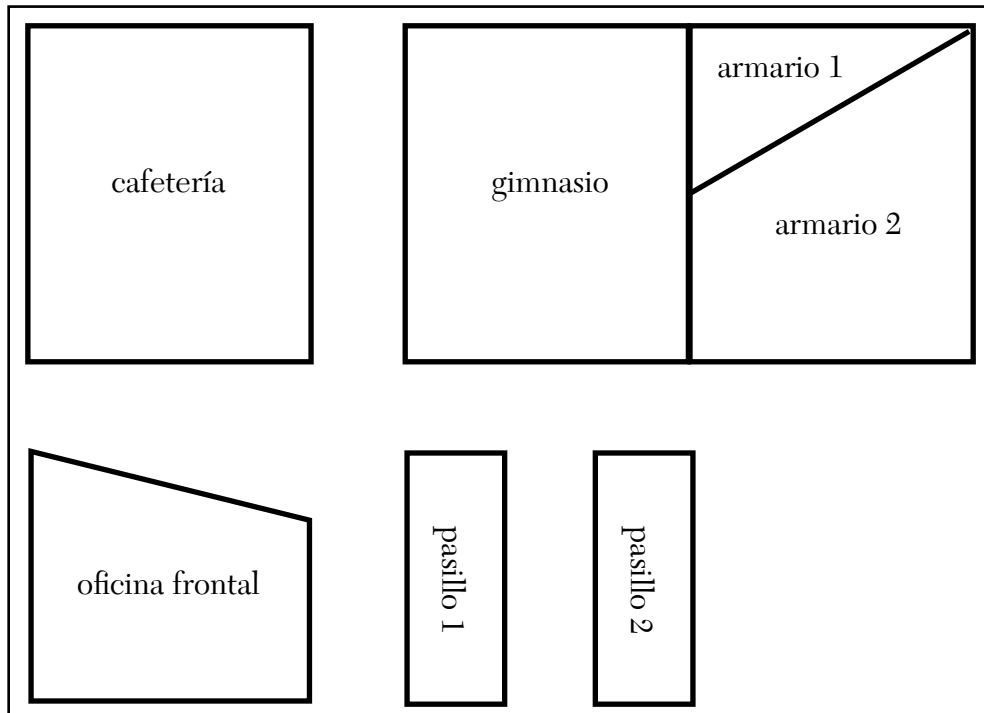
4. Los alumnos de cuarto grado irán de paseo todo el día. Necesitan 120 botellas de agua. James llevó dos cajas de 24 botellas cada una y Ming llevó cuatro cajas de 12 botellas cada una. ¿Cuántas botellas de agua más se necesitan?

- (A) 24 botellas
- (B) 48 botellas
- (C) 14 botellas
- (D) 96 botellas

Tarea de desempeño 1 Nuestro nuevo edificio

Parte A

La clase de matemáticas de la Sra. Robinson la ayuda a dibujar un mapa del nuevo edificio de la escuela. El edificio tiene tres pasillos, una cafetería, una oficina y un gimnasio. La Sra. Robinson preparó un diagrama del edificio:



1. Hay un Pasillo 3 que tiene el mismo tamaño y la misma forma que el Pasillo 1 y el Pasillo 2. Dibuja el Pasillo 3 en el diagrama, a la derecha del Pasillo 2.
2. ¿Cuántos pares de líneas paralelas hay en el Pasillo 3? _____
3. ¿Cómo se llama la figura que forma cada uno de los pasillos? ¿Cómo sabes que ese es el nombre correcto?

4. ¿Cómo se llaman los ángulos que forman las paredes de la cafetería? ¿Cómo sabes que ese es el nombre correcto?
