Mathematics

Grade 4

DETROIT PUBLIC SCHOOLS
COMMUNITY DISTRICT

Dear DPSCD Families,

The Office of Mathematics is partnering with families to support Distance Learning while students are home. As your child's first teacher, we empower you to utilize the resources provided to foster a deeper understanding of grade-level mathematics.

Students in grades K-8 will work from our core curriculum, Eureka Math, utilizing this Academic Packet supported by Knowledge on the Go recorded videos. The videos have a Eureka Math instructor presenting a lesson for students to engage in grade-level mathematics. The instructor will guide students to work through the lesson by completing problems simultaneously with your child and/or asking them to pause the video for independent solving and then check. As the instructor demonstrates sample problems in the Problem Set, Application Problems, Fluency Activities, Examples and/or Exercises, parents feel free to engage your child in this work. Ask students to show work and explain their answers. When appropriate have students add models or drawings to help them solve and record answers in complete sentences.

Daily lesson guidance can be found on the pages that follow. Each day has been designed to provide you access to materials from the Eureka Math Knowledge on the Go website https://gm.greatminds.org/en-us/knowledgeonthego . After you have accessed the site, click your child's grade level, and scroll down to find the desired lesson. The resources are found at the bottom of the page and we recommend the lessons be completed in order.

Eureka Math is our core curriculum, but we also recognize it is necessary to differentiate mathematics instruction to meet all students' needs. Students took the **i-Ready** diagnostic earlier this year and it created a Learning Path for students to follow. Students work weekly on the goals set on the i-Ready Learning Path. After their core math lesson, if able, we ask that students continue to work on their Learning Path by logging on to www.clever.com and selecting the i-Ready icon. In addition, students may also access the i-Ready Teacher-Assigned Lessons which would be an enrichment to grade-level content and should be utilized if extension activities are needed.

If one-on-one, live support is required, please feel free to call the **Homework Hotline** at 1-833-466-3978. Please check the Homework Hotline page for operating hours. We have DPSCD mathematics teachers standing by and are ready to assist.

If students need additional help, and parents have internet access, please refer to the **Homework Helper** document and sign up for an account. Homework Helper provides step by step explanations of how to work the Eureka Math problems. Also, provided on the

Eureka Math Knowledge on the Go website is a plethora of **Additional Resources** that consists of Templates, Homework, Parent Tip Sheets, and more.

We appreciate your continued dedication, support and partnership with Detroit Public Schools Community District and with your assistance we can press forward with our priority: Outstanding Achievement. Be safe. Be well!

Deputy Executive Director of K-12 Mathematics

Parents,

Find additional resources aligned to Eureka Math here:
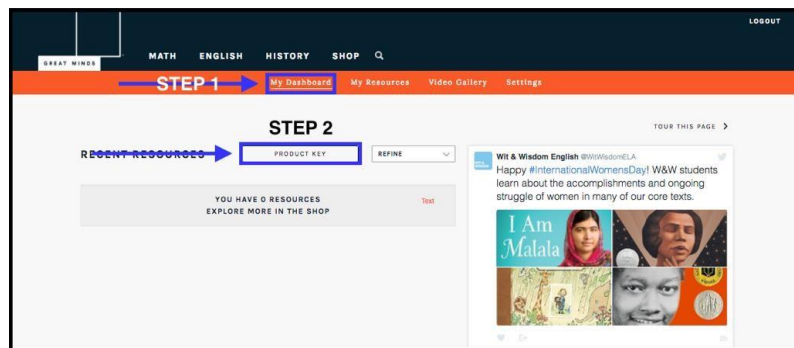
EUREKA MATH™

ACCESSING HOMEWORK HELPER eBOOKS

STEP 1: CREATE AN ACCOUNT
Sign up for a free account at GreatMinds.org/store/signup.

STEP 2: ACCESS YOUR DASHBOARD
Once you have created an account at GreatMinds.org, you will be taken to your Dashboard.

After you have logged in you can also access your Dashboard by clicking "MY DASHBOARD" in the upper right-hand corner of the site.

STEP 3: ENTER YOUR PRODUCT KEY
In your Dashboard you will see several buttons, select "PRODUCT KEY" and enter **H00688525** to access your Homework Helper eBook.

STEP 4: ACCESS YOUR HOMEWORK HELPER eBOOK
After you've entered your Product Key, select a grade-level, and the Homework Helper eBook will be added to your Dashboard. Click "LAUNCH PRODUCT" to navigate into the eBook. Note: if you are viewing the Homework Helper eBooks on a mobile device or tablet, we recommend using landscape view.
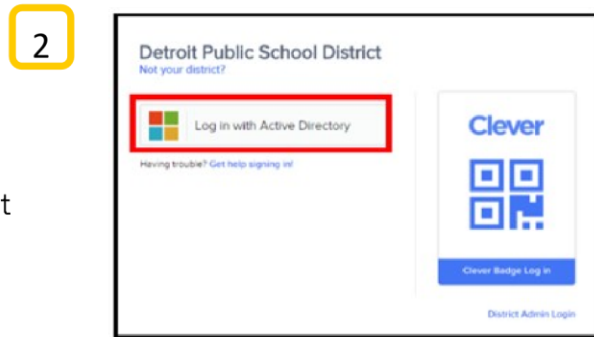
Questions? Contact us at info@GreatMinds.org.

# Clever—How to access DPSCD Curriculum Applications through Clever.com

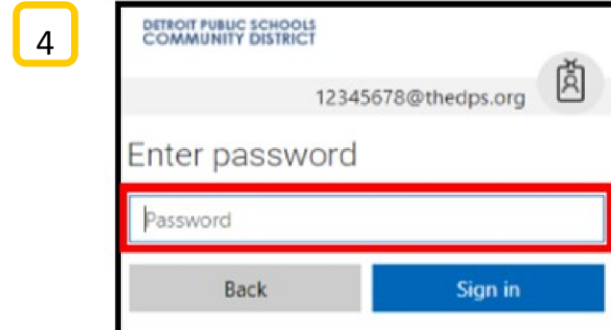**1** Click on the Clever desktop shortcut or open Google Chrome and go to clever.com/in/dpscd

1 | OR | Clever.com/in/dpscd

2 Click "Log in with Active Directory"

Teacher's will use the same credentials that they use to login to their email.

Student's will follow the following format listed below

2

Detroit Public School District
Not your district?

Log in with Active Directory

Having trouble? Get help signing in!

Clever

Clever Badge Log in

District Admin Login

3 Enter student's username in the space identified. The username will consist of the students ID # with @thedps.org appended on.
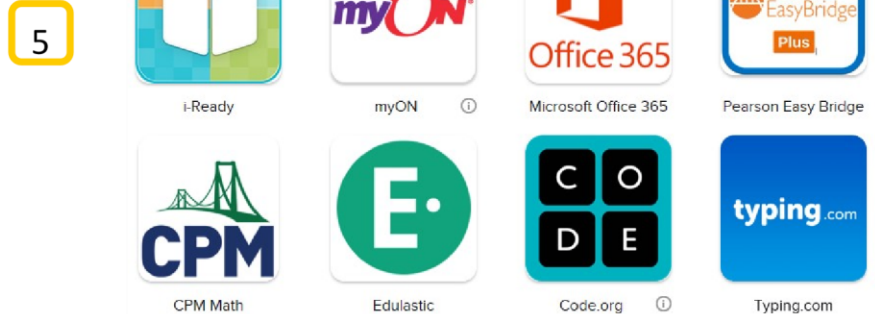
For example 12345678@thedps.org

3

DETROIT PUBLIC SCHOOLS
COMMUNITY DISTRICT

Sign in

Email

Back   Next
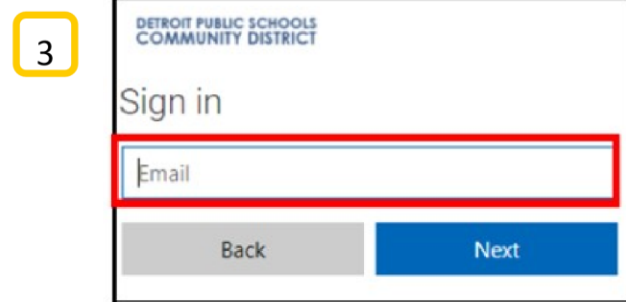
4 Enter the student's password. The password will consist of the following:

First letter of first name in upper case
First letter of last name in lower case
2 digit of their birth month
2 digit of their birth year
01 (male) or 02 (female)

For example: Jane Doe's birthday is May 13, 2004. Her password is Jd050402

4

DETROIT PUBLIC SCHOOLS
COMMUNITY DISTRICT

12345678@thedps.org

Enter password

Password

Back   Sign in

5 Click on the application you are interested in accessing

5

i-Ready

myON

Microsoft Office 365

Pearson Easy Bridge

CPM Math

Edulastic

Code.org

Typing.com

Grade 4 Mathematics WEEKLY DISTANCE LEARNING STUDENT SCHEDULE

4/14/20 to 4/17/20 Week 1 (4 days)	
Directions:	**Parents:** Assist students with accessing the "Knowledge on the Go" videos, Problem Sets in this packet, and i-Ready through the Clever app. Also, monitor student's progress while working on the videos and/or online lessons. **Students:** Click or watch the "Knowledge on the Go" video each day and complete the daily Problem Set. Visit i-ready to continue your learning path and complete Teacher-Assigned lessons.
Target Standard(s)	4.NF.B.3.b | 4.NF.B.4.a
Module Topic	Module 5: Fraction Equivalence, Ordering, and Operations. Topic A: Decomposition and Fraction Equivalence
Materials Needed:	• Access to Knowledge on the Go Lesson Videos & Resources including Templates & Homework Helpers which provide guidance with worked examples for each lesson. • Clever Access for i-Ready (see links and QR codes below) • Paper, Pencil, Academic Packet including Problem Sets Knowledge on the Go Videos Clever.com Additional Resources

	Daily Lesson **(50 Minutes)**	**Extension** **(10-15 minutes)**	**Intervention** **(10 minutes)**
Day 1	**Knowledge on the Go Video for Module 5, Lesson 1** **Module 5, Problem Set 1 (English /Spanish)**	i-Ready "Teacher Assigned" Lesson **clever.com**	i-Ready "My Path" Lesson **clever.com**
Day 2	**Knowledge on the Go Video for Module 5, Lesson 2** **Module 5, Problem Set 2 (English /Spanish)**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 3	**Knowledge on the Go Video for Module 5, Lesson 3** **Module 5, Problem Set 3 (English /Spanish)**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 4	**Knowledge on the Go Video for Module 5, Lesson 4** **Module 5, Problem Set 4 (English /Spanish)**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson

Click the Knowledge on the Go Lesson Materials link or scan the Knowledge on the Go QR Code in the Materials section. Then scroll down and click on the corresponding Module and Lesson. Problem sets are included in this academic packet.

Daily Fluency Practice

Mathematical Fluencies:
In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 1

Standard	4.NF.B.3.b
Learning Target	Decompose fractions as a sum of unit fractions using tape diagrams.
Launch	*Recommended*: Students will *view the "Knowledge on the Go"* video for **Module 5, Lesson 1**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 5, Lesson 1** *from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 5, Lesson 1 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 1.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:

In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 2

Standard	4.NF.B.3.b
Learning Target	Decompose fractions as a sum of unit fractions using tape diagrams.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for* **Module 5, Lesson 2**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 5, Lesson 2** *from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 5, Lesson 2 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 2.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. .Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:

In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 3

Standard	4.NF.B.3.b
Learning Target	Decompose non-unit fractions and represent them as a whole number times a unit fraction using tape diagrams.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for* **Module 5, Lesson 3**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 5, Lesson3** *from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 5, Lesson 3 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 3.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:

In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 4

Standard	4.NF.B.3.b
Learning Target	Represent and identify fractional parts of different wholes.
Launch	**SCAN ME** *Recommended*: Students will *view the "Knowledge on the Go" video for **Module 5, Lesson 4**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	**SCAN ME** *Recommended: Students will complete the Problem Set* for **Module 5, Lesson 4** *from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 5, Lesson 4 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 4.*
Extend	**SCAN ME** *Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Grade 4 Mathematics WEEKLY DISTANCE LEARNING STUDENT SCHEDULE

4/20/20 to 4/24/20 Week 2 (5days)	
Directions:	**Parents:** Assist students with accessing the "Knowledge on the Go" videos, Problem Sets in this packet, and i-Ready through the Clever app. Also, monitor student's progress while working on the videos and/or online lessons. **Students:** Click or watch the "Knowledge on the Go" video each day and complete the daily Problem Set. Visit i-ready to continue your learning path and complete Teacher-Assigned lessons.
Standard(s)	4.NF.B.3.b | 4.NF.B.4.a
Module Topic	Module 5: Fraction Equivalence, Ordering, and Operations. Topic B: Fraction Equivalence Using Multiplication and Division
Materials Needed:	• Access to Knowledge on the Go Lesson Videos & Resources including Templates & Homework Helpers which provide guidance with worked examples for each lesson. • Clever Access for i-Ready (see links and QR codes below) • Paper, Pencil, Academic Packet including Problem Set SCAN ME SCAN ME SCAN ME Knowledge on the Go Videos Clever.com Additional Resources

	Daily Lesson (50 Minutes)	Extension (10-15 minutes)	Intervention (10 minutes)
Day 5	**Knowledge on the Go Video for Module 5, Lesson 5** **Module 5, Problem Set 5 (English /Spanish)** **Homework Helper (English /Spanish)**	i-Ready "Teacher Assigned" Lesson **clever.com**	i-Ready "My Path" Lesson **clever.com**
Day 6	**Knowledge on the Go Video for Module 5, Lesson 6** **Module 5, Problem Set 6 (English /Spanish)** **Homework Helper (English /Spanish)**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 7	**Knowledge on the Go Video for Module 5, Lesson 7** **Module 5, Problem Set 7 (English /Spanish)** **Homework Helper (English /Spanish)**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 8	**Knowledge on the Go Video for Module 5, Lesson 8** **Module 5, Problem Set 8 (English /Spanish)** **Homework Helper (English /Spanish)**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 9	**Knowledge on the Go Video for Module 5, Lesson 9** **Module 5, Problem Set 9 (English /Spanish)**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 5

Standard	4.NF.B.4.a
Learning Target	Decompose unit fractions using area models to show equivalence.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for **Module 5, Lesson5**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set for **Module 5, Lesson 5** from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 5, Lesson 5 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 5.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention.	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 6

Standard	4.NF.B.4.a
Learning Target	Decompose fractions using area models to show equivalence.
Launch	**Recommended**: Students will *view the "Knowledge on the Go" video for Module 5, Lesson 6*. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	**Recommended:** *Students will complete the Problem Set for Module 5, Lesson 6 from the "Knowledge on the Go video along with the instructor.* These are included in this academic packet or can be accessed here: Module 5, Lesson 6 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 6.*
Extend	**Recommended:** Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	**Recommended**: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 7

Standard	4.NF.A.1
Learning Target	Use the area model and multiplication to show the equivalence of two fractions.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for* **Module 5, Lesson 7**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 5, Lesson 7** *from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 5, Lesson 7 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 7.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention.	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 8

Standard	4.NF.A.1
Learning Target	Use the area model and multiplication to show the equivalence of two fractions.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for* **Module 5, Lesson 8**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 5, Lesson 8** *from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 5, Lesson 8 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 8.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 9

Standard	4.NF.A.1
Learning Target	Use the area model and division to show the equivalence of two fractions.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for* **Module 5, Lesson 9**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 5, Lesson 9** *from the "Knowledge on the Go video along with the instructor.* These are included in this academic packet or can be accessed here: Module 5, Lesson 9 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 9.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Grade 4 Mathematics WEEKLY DISTANCE LEARNING STUDENT SCHEDULE

4/27/20 to 5/1/20 Week 3 (5 days)	
Directions:	**Parents:** Assist students with accessing the "Knowledge on the Go" videos, Problem Sets in this packet, and i-Ready through the Clever app. Also, monitor student's progress while working on the videos and/or online lessons. **Students:** Click or watch the "Knowledge on the Go" video each day and complete the daily Problem Set. Visit i-ready to continue your learning path and complete Teacher-Assigned lessons.
Standard(s)	4.NF.A.1 4.NF.A.2
Module Topic	Module 5: Fraction Equivalence, Ordering, and Operations. Topic B: Fraction Equivalence Using Multiplication and Division
Materials Needed:	• Access to Knowledge on the Go Lesson Videos & Resources including Templates & Homework Helpers which provide guidance with worked examples for each lesson. • Clever Access for i-Ready (see links and QR codes below) • Paper, Pencil, Academic Packet including Problem Set SCAN ME SCAN ME SCAN ME Knowledge on the Go Videos Clever.com Additional Resources

	Daily Lesson (50 Minutes)	Extension (10-15 minutes)	Intervention (10 minutes)
Day 10	**Knowledge on the Go Lesson Materials for Module 5, Lesson 10**	i-Ready "Teacher Assigned" Lesson **clever.com**	i-Ready "My Path" Lesson **clever.com**
Day 11	**Knowledge on the Go Lesson Materials for Module 5, Lesson 11**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 12	**Knowledge on the Go Lesson Materials for Module 5, Lesson 12**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 13	**Knowledge on the Go Lesson Materials for Module 5, Lesson 13**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 14	**Knowledge on the Go Lesson Materials for Module 5, Lesson 14**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson

Click the Knowledge on the Go Lesson Materials link or scan the Knowledge on the Go QR Code in the Materials section. Then scroll down and click on the corresponding Module and Lesson. Problem sets are included in this academic packet.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 10

Standard	3. 4.NF.A.1
Learning Target	Use the area model and division to show the equivalence of two fractions..
Launch	*Recommended*: Students will *view the* "*Knowledge on the Go*" *video for **Module 5, Lesson10**.* Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for ***Module 5, Lesson 10** from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 5, Lesson 10 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 10.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

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Daily Fluency Practice

Mathematical Fluencies:
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Lesson 11

Standard	4.NF.A.1
Learning Target	Explain fraction equivalence using a tape diagram and the number line, and relate that to the use of multiplication and division.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for* **Module 5, Lesson 11**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended:* Students will complete the Problem Set for **Module 5, Lesson 11** from the "Knowledge on the Go video along with the instructor.* These are included in this academic packet or can be accessed here: Module 5, Lesson 11 Problem Set
Closing	Students will reflect and share their learning from Module 5, Lesson11.
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
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Lesson 12

Standard	4.NF.A.2
Learning Target	Reason using benchmarks to compare two fractions on the number line.
Launch	SCAN ME *Recommended*: Students will *view the "Knowledge on the Go" video for **Module 5, Lesson 12**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.*
Guided Practice	SCAN ME *Recommended: Students will complete the Problem Set* for **Module 5, Lesson 12** *from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 5, Lesson 12 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 12.*
Extend	SCAN ME *Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 13

Standard	3. 4.NF.A.2
Learning Target	Reason using benchmarks to compare two fractions on the number line.
Launch	**Recommended**: Students will *view the "Knowledge on the Go" video for Module 5, Lesson 13*. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	**Recommended:** *Students will complete the Problem Set for Module 5, Lesson 13 from the "Knowledge on the Go video along with the instructor.* These are included in this academic packet or can be accessed here: Module 5, Lesson 13 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson13.*
Extend	**Recommended:** Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention.	**Recommended**: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 14

Standard	4.NF.A.2
Learning Target	Find common units or number of units to compare two fractions.
Launch	**Recommended**: Students will *view the "Knowledge on the Go" video for* **Module 5, Lesson 14**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	**Recommended:** *Students will complete the Problem Set for* **Module 5, Lesson 14** *from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 5, Lesson 14 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson14.*
Extend	**Recommended:** Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention.	**Recommended**: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Grade 4 Mathematics WEEKLY DISTANCE LEARNING STUDENT SCHEDULE

5/4/20 to 5/8/20 Week 4 (5 days)	
Directions:	**Parents:** Assist students with accessing the "Knowledge on the Go" videos, Problem Sets in this packet, and i-Ready through the Clever app. Also, monitor student's progress while working on the videos and/or online lessons. **Students:** Click or watch the "Knowledge on the Go" video each day and complete the daily Problem Set. Visit i-ready to continue your learning path and complete Teacher-Assigned lessons.
Standard(s)	4.NF.B.3.a | 4.NF.B.3.d
Module Topic	Module 5: Fractions, Equivalence, Ordering and Operations Topic D; Fraction addition and subtraction
Materials Needed:	• Access to Knowledge on the Go Lesson Videos & Resources including Templates & Homework Helpers which provide guidance with worked examples for each lesson. • Clever Access for i-Ready (see links and QR codes below) • Paper, Pencil, Academic Packet including Problem Set 📱 SCAN ME　　　📱 SCAN ME　　　📱 SCAN ME Knowledge on the Go Videos　　Clever.com　　Additional Resources

	Daily Lesson (50 Minutes)	Extension (10-15 minutes)	Intervention (10 minutes)
Day 15	**Knowledge on the Go Video for Module 5, Lesson 15**	i-Ready "Teacher Assigned" Lesson **clever.com**	i-Ready "My Path" Lesson **clever.com**
Day 16	**Knowledge on the Go Video for Module 5, Lesson 16**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 17	**Knowledge on the Go Video for Module 5, Lesson 17**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 18	**Knowledge on the Go Video for Module 5, Lesson 18**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 19	**Knowledge on the Go Video for Module 5, Lesson 19**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson

Click the Knowledge on the Go Lesson Materials link or scan the Knowledge on the Go QR Code in the Materials section. Then scroll down and click on the corresponding Module and Lesson. Problem sets are included in this academic packet.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 15

Standard	3. 4.NF.A.2
Learning Target	Place any fraction on a number line with endpoints 0 and 1.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for* **Module 5, Lesson 15**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 5, Lesson 15** *from the "Knowledge on the Go video along with the instructor.* These are included in this academic packet or can be accessed here: Module 5, Lesson 15 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson15.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 16

Standard	4.NF.B.3.a	4.NF.B.3.d
Learning Target	Place whole number fractions and fractions between whole numbers on the number line.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for **Module 5, Lesson 16**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set for **Module 5, Lesson 16** from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 5, Lesson 16 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 16.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 17

Standard	4.NF.B.3.a	4.NF.B.3.d
Learning Target	Practice placing various fractions on the number line.
Launch	**SCAN ME** *Recommended*: Students will *view the "Knowledge on the Go" video for **Module 5, Lesson 17***. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	**SCAN ME** *Recommended: Students will complete the Problem Set for **Module 5, Lesson 17** from the "Knowledge on the Go video along with the instructor. These are included in this academic packet or can be accessed here:* Module 5, Lesson 17 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 17.*
Extend	**SCAN ME** *Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 18

Standard	3. 4.NF.B.3.a | 4.NF.B.3.d
Learning Target	Compare fractions and whole numbers on the number line by reasoning about their distance from 0.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for **Module 5, Lesson 18**.* Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set for **Module 5, Lesson 18** from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 5, Lesson 18 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 18.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 19

Standard	4.NF.B.3.a | 4.NF.B.3.d
Learning Target	Build and write fractions greater than one whole using unit fractions.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for **Module 5, Lesson 19**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 5, Lesson 19** *from the "Knowledge on the Go video along with the instructor. These are included in this academic packet or can be accessed here:* Module 5, Lesson 19 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 19.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Grade 4 Mathematics WEEKLY DISTANCE LEARNING STUDENT SCHEDULE

5/11/20 to 5/15/20 Week 5 (5 days)	
Directions:	**Parents:** Assist students with accessing the "Knowledge on the Go" videos, Problem Sets in this packet, and i-Ready through the Clever app. Also, monitor student's progress while working on the videos and/or online lessons. **Students:** Click or watch the "Knowledge on the Go" video each day and complete the daily Problem Set. Visit i-ready to continue your learning path and complete Teacher-Assigned lessons.
Standard(s)	4.NF.B.3.a	4.NF.B.3.d 4.MD.B.4	4.NF.A.2	4.NF.B.3
Module Topic	Module 5: Fractions Equivalence, Ordering and Operations Topic E; Extending Fraction Equivalence to Fractions Greater Than 1
Materials Needed:	• Access to Knowledge on the Go Lesson Videos & Resources including Templates & Homework Helpers which provide guidance with worked examples for each lesson. • Clever Access for i-Ready (see links and QR codes below) • Paper, Pencil, Academic Packet including Problem Set Knowledge on the Go Videos Clever.com Additional Resources

	Daily Lesson (50 Minutes)	Extension (10-15 minutes)	Intervention (10 minutes)
Day 20	**Knowledge on the Go Video for Module 5, Lesson 20**	i-Ready "Teacher Assigned" Lesson **clever.com**	i-Ready "My Path" Lesson **clever.com**
Day 21	**Knowledge on the Go Video for Module 5, Lesson 21**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 22	**Knowledge on the Go Video for Module 5, Lesson 22**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 23	**Knowledge on the Go Video for Module 5, Lesson 23**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 24	**Knowledge on the Go Video for Module 5, Lesson 24**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson

Click the Knowledge on the Go Lesson Materials link or scan the Knowledge on the Go QR Code in the Materials section. Then scroll down and click on the corresponding Module and Lesson. Problem sets are included in this academic packet.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 20

Standard	4.NF.B.3.a	4.NF.B.3.d
Learning Target	:Use visual models to add two fractions with related units using the denominators 2, 3, 4, 5, 6, 8, 10, and 12.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for* **Module 5, Lesson 20**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 5, Lesson 20** *from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 5, Lesson 20 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 20.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 21

Standard	4.NF.B.3.a	4.NF.B.3.d
Learning Target	:Use visual models to add two fractions with related units using the denominators 2, 3, 4, 5, 6, 8, 10, and 12.
Launch	**Recommended**: Students will *view the "Knowledge on the Go" video for **Module 5, Lesson 21**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	**Recommended:** *Students will complete the Problem Set for **Module 5, Lesson 21** from the "Knowledge on the Go video along with the instructor.* These are included in this academic packet or can be accessed here:* Module 5, Lesson 21 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 21.*
Extend	**Recommended:** Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	**Recommended**: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 22

Standard	4.NF.B.3.a	4.NF.B.3.d
Learning Target	Add a fraction less than 1 to, or subtract a fraction less than 1 from, a whole number using decomposition and visual models.
Launch	[QR code: SCAN ME] *Recommended*: Students will *view the "Knowledge on the Go" video for* **Module 5, Lesson 22**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	[QR code: SCAN ME] *Recommended: Students will complete the Problem Set* for **Module 5, Lesson 22** *from the "Knowledge on the Go video along with the instructor.* These are included in this academic packet or can be accessed here:* Module 5, Lesson 22 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 22.*
Extend	[QR code: SCAN ME] *Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 23

Standard	4.NF.B.3.a | 4.NF.B.3.d
Learning Target	Add and multiply unit fractions to build fractions greater than 1 using visual models.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for* **Module 5, Lesson 23**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 5, Lesson 23** *from the "Knowledge on the Go video along with the instructor.* These are included in this academic packet or can be accessed here: Module 5, Lesson 18 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 23.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention.	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 24

Standard	4.NF.B.3.a	4.NF.B.3.d
Learning Target	:Decompose and compose fractions greater than 1 to express them in various forms.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for **Module 5, Lesson 24**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 5, Lesson 24** *from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 5, Lesson 24 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 24.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Grade 4 Mathematics WEEKLY DISTANCE LEARNING STUDENT SCHEDULE

5/18/20 to 5/22/20 Week 6 (5 days)	
Directions:	**Parents:** Assist students with accessing the "Knowledge on the Go" videos, Problem Sets in this packet, and i-Ready through the Clever app. Also, monitor student's progress while working on the videos and/or online lessons. **Students:** Click or watch the "Knowledge on the Go" video each day and complete the daily Problem Set. Visit i-ready to continue your learning path and complete Teacher-Assigned lessons.
Target Standard(s)	4.MD.B.4 | 4.NF.A.2 | 4.NF.B.3
Module **Topic**	Module 5: Fractions Equivalence, Ordering and Operations Topic D; Extending Fraction Equivalence to Fractions Greater Than 1
Materials Needed:	- Access to Knowledge on the Go Lesson Videos & Resources including Templates & Homework Helpers which provide guidance with worked examples for each lesson. - Clever Access for i-Ready (see links and QR codes below) - Paper, Pencil, Academic Packet including Problem Set <table><tr><td>📱 SCAN ME</td><td>📱 SCAN ME</td><td>📱 SCAN ME</td></tr><tr><td>Knowledge on the Go Videos</td><td>Clever.com</td><td>Additional Resources</td></tr></table>

	Daily Lesson (50 Minutes)	Extension (10-15 minutes)	Intervention (10 minutes)
Day 25	**Knowledge on the Go Video for Module 5, Lesson 25**	i-Ready "Teacher Assigned" Lesson **clever.com**	i-Ready "My Path" Lesson **clever.com**
Day 26	**Knowledge on the Go Video for Module 5, Lesson 26**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 27	**Knowledge on the Go Video for Module 5, Lesson 27**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 28	**Knowledge on the Go Video for Module 5, Lesson 29**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 29	**Knowledge on the Go Video for Module 5, Lesson 29**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson

Click the Knowledge on the Go Lesson Materials link or scan the Knowledge on the Go QR Code in the Materials section. Then scroll down and click on the corresponding Module and Lesson. Problem sets are included in this academic packet.

Daily Fluency Practice

Mathematical Fluencies:

In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 25

Standard	4.NF.B.3.b
Learning Target	Decompose and compose fractions greater than 1 to express them in various forms.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for **Module 5, Lesson 25**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 5, Lesson 25** *from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 5, Lesson 25 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 25.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:

In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 26

Standard	4.NF.B.3.b
Learning Target	Compare fractions greater than 1 by reasoning using benchmark fractions.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for* **Module 5, Lesson 26**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set for* **Module 5, Lesson 26** *from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 5, Lesson 26 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 26.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 27

Standard	4.NF.B.3.b
Learning Target	Compare fractions greater than 1 by creating common numerators or denominators.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for **Module 5, Lesson 27**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for ***Module 5, Lesson 27*** *from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 5, Lesson 27 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 27.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 28

Standard	4.NF.B.3.b
Learning Target	Solve word problems with line plots.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video* for **Module 5, Lesson 28**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 5, Lesson 28** *from the "Knowledge on the Go video along with the instructor.* These are included in this academic packet or can be accessed here:* Module 5, Lesson 28 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 28.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention.	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 29

Standard	4.NF.B.3.c
Learning Target	Estimate sums and differences using benchmark numbers.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for **Module 5, Lesson 29**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 5, Lesson 29** *from the "Knowledge on the Go video along with the instructor.* These are included in this academic packet or can be accessed here:* Module 5, Lesson 29 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 29.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Grade 4 Mathematics WEEKLY DISTANCE LEARNING STUDENT SCHEDULE

5/18/20 to 5/22/20 Week 7 (4 days)	
Directions:	**Parents:** Assist students with accessing the "Knowledge on the Go" videos, Problem Sets in this packet, and i-Ready through the Clever app. Also, monitor student's progress while working on the videos and/or online lessons. **Students:** Click or watch the "Knowledge on the Go" video each day and complete the daily Problem Set. Visit i-ready to continue your learning path and complete Teacher-Assigned lessons.
Target Standard(s)	4.NF.B.3.c
Module Topic	Module 5: Fractions Equivalence, Ordering and Operations Topic F: Addition and Subtraction of Fractions by Decomposition
Materials Needed:	• Access to Knowledge on the Go Lesson Videos & Resources including Templates & Homework Helpers which provide guidance with worked examples for each lesson. • Clever Access for i-Ready (see links and QR codes below) • Paper, Pencil, Academic Packet including Problem Set SCAN ME SCAN ME SCAN ME Knowledge on the Go Videos Clever.com Additional Resources

	Daily Lesson (50 Minutes)	Extension (10-15 minutes)	Intervention (10 minutes)
Day 30	**Knowledge on the Go Video for Module 5, Lesson 30**	i-Ready "Teacher Assigned" Lesson **clever.com**	i-Ready "My Path" Lesson **clever.com**
Day 31	**Knowledge on the Go Video for Module 5, Lesson 31**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 32	**Knowledge on the Go Video for Module 5, Lesson 32**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 33	**Knowledge on the Go Video for Module 5, Lesson 33**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson

Click the Knowledge on the Go Lesson Materials link or scan the Knowledge on the Go QR Code in the Materials section. Then scroll down and click on the corresponding Module and Lesson. Problem sets are included in this academic packet.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 30

Standard	4.NF.B.3.c
Learning Target	Add a mixed number and a fraction.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for Module 5, Lesson 30*. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set for Module 5, Lesson 30 from the "Knowledge on the Go video along with the instructor.* These are included in this academic packet or can be accessed here: Module 5, Lesson 30 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 30.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 31

Standard	34.NF.B.3.c
Learning Target	Add mixed numbers.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for* **Module 5, Lesson 31.**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 5 Lesson 31** *from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 5, Lesson 31 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 31.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention ·	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 32

Standard	4.NF.B.3.c
Learning Target	Subtract a fraction from a mixed number.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for **Module 5, Lesson 32**.* Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set for **Module 5, Lesson 32** from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 5, Lesson 32 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 32.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 33

Standard	4.NF.B.3.c
Learning Target	Subtract a mixed number from a mixed number.
Launch	**SCAN ME** *Recommended*: Students will *view the "[Knowledge on the Go](#)" video for **Module 5, Lesson 33**.* Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	**SCAN ME** *Recommended: Students will complete the Problem Set for **Module 5, Lesson 33** from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* [Module 5, Lesson 33 Problem Set](#)
Closing	*Students will reflect and share their learning from Module 5, Lesson 33.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit [Clever.com](#) to access i-Ready. **SCAN ME**
Intervention.	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit [Clever.com](#) to access i-Ready.

Grade 4 Mathematics WEEKLY DISTANCE LEARNING STUDENT SCHEDULE

6/1/20 to 6/5/20 Week 8 (5 days)	
Directions:	**Parents:** Assist students with accessing the "Knowledge on the Go" videos, Problem Sets in this packet, and i-Ready through the Clever app. Also, monitor student's progress while working on the videos and/or online lessons. **Students:** Click or watch the "Knowledge on the Go" video each day and complete the daily Problem Set. Visit i-ready to continue your learning path and complete Teacher-Assigned lessons.
Target Standard(s)	4.NF.B.4
Module Topic	Module 5: Fractions Equivalence, Ordering and Operations Topic G: Repeated Addition off Fractions as Multiplication
Materials Needed:	• Access to Knowledge on the Go Lesson Videos & Resources including Templates & Homework Helpers which provide guidance with worked examples for each lesson. • Clever Access for i-Ready (see links and QR codes below) • Paper, Pencil, Academic Packet including Problem Set [QR] SCAN ME Knowledge on the Go Videos [QR] SCAN ME Clever.com [QR] SCAN ME Additional Resources

	Daily Lesson (50 Minutes)	Extension (10-15 minutes)	Intervention (10 minutes)
Day 34	**Knowledge on the Go Video for Module 5, Lesson 34**	i-Ready "Teacher Assigned" Lesson **clever.com**	i-Ready "My Path" Lesson **clever.com**
Day 35	**Knowledge on the Go Video for Module 5, Lesson 35**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 36	**Knowledge on the Go Video for Module 5, Lesson 36**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 37	**Knowledge on the Go Video for Module 5, Lesson 37**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 38	**Knowledge on the Go Video for Module 5, Lesson 38**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson

Click the Knowledge on the Go Lesson Materials link or scan the Knowledge on the Go QR Code in the Materials section. Then scroll down and click on the corresponding Module and Lesson. Problem sets are included in this academic packet.

Daily Fluency Practice

Mathematical Fluencies:

In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 34

Standard	4.NF.B.3.c
Learning Target	Subtract mixed numbers.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for* **Module 5, Lesson 34**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 5, Lesson 34** *from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 5, Lesson 34 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 34.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 35

Standard	4.NF.B.4
Learning Target	Represent the multiplication of n times a/b as (n × a)/b using the associative property and visual models.
Launch	**Recommended**: Students will *view the "Knowledge on the Go" video for **Module 5, Lesson 35**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	**Recommended:** *Students will complete the Problem Set for **Module 5, Lesson 35** from the "Knowledge on the Go video along with the instructor.* These are included in this academic packet or can be accessed here: Module 5, Lesson 35 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 35.*
Extend	**Recommended:** Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention.	**Recommended**: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 36

Standard	4.NF.B.4
Learning Target	Represent the multiplication of n times a/b as (n × a)/b using the associative property and visual models.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for **Module 5, Lesson 36**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set for **Module 5, Lesson 36** from the "Knowledge on the Go video along with the instructor. These are included in this academic packet or can be accessed here:* Module 5, Lesson 36 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 36.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 37

Standard	4.NF.B.4
Learning Target	Find the product of a whole number and a mixed number using the distributive property.
Launch	**SCAN ME** *Recommended*: Students will *view the "Knowledge on the Go" video for **Module 5, Lesson 37**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	**SCAN ME** *Recommended: Students will complete the Problem Set* for ***Module 5, Lesson 37*** *from the "Knowledge on the Go video along with the instructor. These are included in this academic packet or can be accessed here:* Module 5, Lesson 37 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 37.*
Extend	**SCAN ME** *Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 38

Standard	4.NF.B.4
Learning Target	Find the product of a whole number and a mixed number using the distributive property.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for* **Module 5, Lesson 38**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 6, Lesson 38** *from the "Knowledge on the Go"5video*. Scan the Knowledge on the Go QR Code or click the link to access the Module 5, Lesson 38 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 38.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Grade 4 Mathematics WEEKLY DISTANCE LEARNING STUDENT SCHEDULE

6/8/20 to 6/12/20 Week 9 (5 days)	
Directions:	**Parents:** Assist students with accessing the "Knowledge on the Go" videos, Problem Sets in this packet, and i-Ready through the Clever app. Also, monitor student's progress while working on the videos and/or online lessons. **Students:** Click or watch the "Knowledge on the Go" video each day and complete the daily Problem Set. Visit i-ready to continue your learning path and complete Teacher-Assigned lessons.
Standard(s)	3.OA.D.8
Module **Topic**	Module 5: Fractions Equivalence, Ordering and Operations Topic F: Repeated Addition off Fractions as Multiplication
Materials Needed:	• Access to Knowledge on the Go Lesson Videos & Resources including Templates & Homework Helpers which provide guidance with worked examples for each lesson. • Clever Access for i-Ready (see links and QR codes below) • Paper, Pencil, Academic Packet including Problem Set [QR code] SCAN ME [QR code] SCAN ME [QR code] SCAN ME Knowledge on the Go Videos Clever.com Additional Resources

	Daily Lesson (50 Minutes)	Extension (10-15 minutes)	Intervention (10 minutes)
Day 39	**Knowledge on the Go Video for Module 5, Lesson 39**	i-Ready "Teacher Assigned" Lesson **clever.com**	i-Ready "My Path" Lesson **clever.com**
Day 40	**Knowledge on the Go Video for Module 5, Lesson 40**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 41	**Knowledge on the Go Video for Module 5, Lesson 41**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 42	**Knowledge on the Go Video for Module 6, Lesson 1**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 43	**Knowledge on the Go Video for Module 6, Lesson 2**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson

Click the Knowledge on the Go Lesson Materials link or scan the Knowledge on the Go QR Code in the Materials section. Then scroll down and click on the corresponding Module and Lesson. Problem sets are included in this academic packet.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 39

Standard	4.NF.B.4
Learning Target	Solve multiplicative comparison word problems involving fractions.
Launch	SCAN ME *Recommended*: Students will *view the "Knowledge on the Go" video for* **Module 5, Lesson 39** Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	SCAN ME *Recommended: Students will complete the Problem Set* for **Module 5, Lesson 39** *from the "Knowledge on the Go video along with the instructor.* These are included in this academic packet or can be accessed here: Module 5, Lesson 39 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 39.*
Extend	SCAN ME *Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:

In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 40

Standard	4.NF.B.4
Learning Target	Solve word problems involving the multiplication of a whole number and a fraction including those involving line plots.
Launch	*Recommended*: Students will *view the "[Knowledge on the Go](#)" video for **Module 5, Lesson 40**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 5, Lesson40** *from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* [Module 5, Lesson 40 Problem Set](#)
Closing	*Students will reflect and share their learning from Module 5, Lesson 40.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit [Clever.com](#) to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit [Clever.com](#) to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:

In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 41

Standard	3.OA.C.5
Learning Target	Solve word problems in varied contexts using a letter to represent the unknown.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for **Module5, Lesson 41**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 5, Lesson 41** *from the "Knowledge on the Go video along with the instructor.* These are included in this academic packet or can be accessed here: Module 5, Lesson 41 Problem Set
Closing	*Students will reflect and share their learning from Module 5, Lesson 41.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:

In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 42

Standard	4.NF.C.6
Learning Target	Use metric measurement to model the decomposition of one whole into tenths.
Launch	**Recommended**: Students will *view the "Knowledge on the Go" video for* **Module 6, Lesson 1**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	**Recommended:** *Students will complete the Problem Set for* **Module 6, Lesson1** *from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 6, Lesson 1 Problem Set
Closing	*Students will reflect and share their learning from Module 6, Lesson 1.*
Extend	**Recommended:** Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention.	**Recommended**: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 43

Standard	4.NF.C.6
Learning Target	Use metric measurement and area models to represent tenths as fractions greater than 1 and decimal numbers.
Launch	**Recommended**: Students will *view the "Knowledge on the Go" video for **Module 6, Lesson 2**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	**Recommended:** *Students will complete the Problem Set* for **Module 6, Lesson 2** *from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 6, Lesson 2 Problem Set
Closing	*Students will reflect and share their learning from Module 6, Lesson 2.*
Extend	**Recommended:** Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	**Recommended**: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Grade 4 Mathematics WEEKLY DISTANCE LEARNING STUDENT SCHEDULE

6/15/20 to 6/19/20 Week 10 (5 days)	
Directions:	**Parents:** Assist students with accessing the "Knowledge on the Go" videos, Problem Sets in this packet, and i-Ready through the Clever app. Also, monitor student's progress while working on the videos and/or online lessons. **Students:** Click or watch the "Knowledge on the Go" video each day and complete the daily Problem Set. Visit i-ready to continue your learning path and complete Teacher-Assigned lessons.
Standard(s)	4.NF.C.6 4.NF.C.5 | 4.NF.C.6
Module Topic	Module 6: Decimal Fractions Topic A: Exploration of Tenths Topic B: Tenths and Hundredths
Materials Needed:	• Access to Knowledge on the Go Lesson Videos & Resources including Templates & Homework Helpers which provide guidance with worked examples for each lesson. • Clever Access for i-Ready (see links and QR codes below) • Paper, Pencil, Academic Packet including Problem Set [QR code] SCAN ME [QR code] SCAN ME [QR code] SCAN ME Knowledge on the Go Videos Clever.com Additional Resources

	Daily Lesson (50 Minutes)	**Extension (10-15 minutes)**	**Intervention (10 minutes)**
Day 44	**Knowledge on the Go Video for Module 6, Lesson 3**	i-Ready "Teacher Assigned" Lesson **clever.com**	i-Ready "My Path" Lesson **clever.com**
Day 45	**Knowledge on the Go Video for Module 6, Lesson 4**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 46	**Knowledge on the Go Video for Module 6, Lesson 5**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson
Day 47	**Knowledge on the Go Video for Module 6, Lesson 6**	i-Ready "Teacher Assigned" Lesson	i-Ready "My Path" Lesson

Click the Knowledge on the Go Lesson Materials link or scan the Knowledge on the Go QR Code in the Materials section. Then scroll down and click on the corresponding Module and Lesson. Problem sets are included in this academic packet.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 44

Standard	4.NF.C.6
Learning Target	Represent mixed numbers with units of tens, ones, and tenths with place value disks, on the number line, and in expanded form.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for* **Module 6, Lesson 3**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 6, Lesson 3** *from the "Knowledge on the Go video along with the instructor.* These are included in this academic packet or can be accessed here: Module 6, Lesson 3 Problem Set
Closing	*Students will reflect and share their learning from Module 6, Lesson 3.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended:* Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 45

Standard	4.NF.C.5
Learning Target	Use meters to model the decomposition of one whole into hundredths. Represent and count hundredths.
Launch	**Recommended**: Students will *view the "Knowledge on the Go" video for* **Module 6, Lesson 4**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	**Recommended:** *Students will complete the Problem Set for* **Module 6, Lesson 4** *from the "Knowledge on the Go video along with the instructor.* *These are included in this academic packet or can be accessed here:* Module 6, Lesson 4 Problem Set
Closing	*Students will reflect and share their learning from Module 6, Lesson 4.*
Extend	**Recommended:** Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	**Recommended**: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 46

Standard	4.NF.C.5
Learning Target	Model the equivalence of tenths and hundredths using the area model and place value disks.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for **Module 6, Lesson 5**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set for **Module 6, Lesson 5** from the "Knowledge on the Go video along with the instructor. These are included in this academic packet or can be accessed here:* Module 6, Lesson 5 Problem Set
Closing	*Students will reflect and share their learning from Module 6, Lesson 5.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Daily Fluency Practice

Mathematical Fluencies:
In In Grade 4, students are expected to add and subtract within 1,000,000. This is a great time to practice these skills.

Lesson 47

Standard	4.NF.C.5
Learning Target	Use the area model and number line to represent mixed numbers with units of ones, tenths, and hundredths in fraction and decimal forms.
Launch	*Recommended*: Students will *view the "Knowledge on the Go" video for* **Module 6, Lesson 6**. Scan the Knowledge on the Go QR Code or click the link to access the video. We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	*Recommended: Students will complete the Problem Set* for **Module 6, Lesson 6** *from the "Knowledge on the Go video along with the instructor.* These are included in this academic packet or can be accessed here: Module 6, Lesson 6 Problem Set
Closing	*Students will reflect and share their learning from Module 6, Lesson 6.*
Extend	*Recommended:* Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention .	*Recommended*: Students will work on their individual Learning Path (My Path) in i-Ready. Visit Clever.com to access i-Ready.

Learn

Eureka Math®
Grade 4
Module 5

Use your scissors to cut an index card on the diagonal lines. Prove that you have cut the rectangle into 4 fourths. Include a drawing in your explanation.

_____

_____

_____

_____
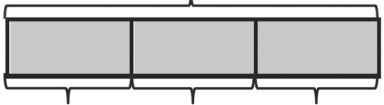
Read   **Draw**   **Write**
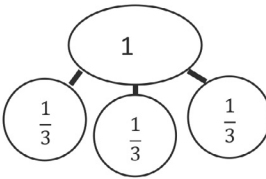
Name _____   Date _____
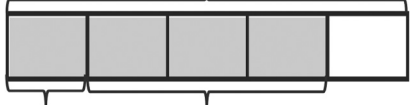
1. Draw a number bond, and write the number sentence to match each tape diagram. The first one is done for you.

a.
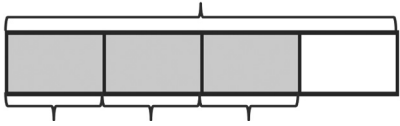
$$1 = \frac{1}{3} + \frac{1}{3} + \frac{1}{3}$$
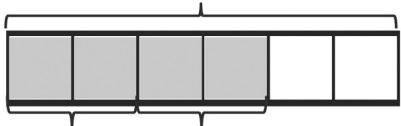
b.
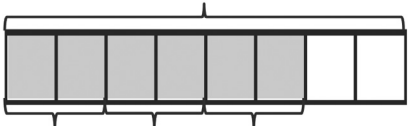
c.
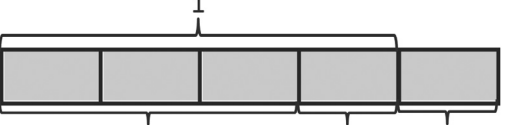
d.

e.

f.

g.
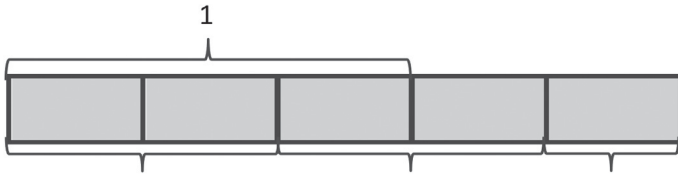
h.
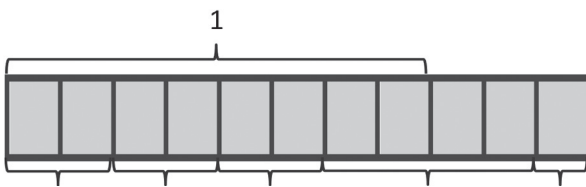
2. Draw and label tape diagrams to model each decomposition.

a. $1 = \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6}$

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

c. $\frac{7}{8} = \frac{3}{8} + \frac{3}{8} + \frac{1}{8}$

d. $\frac{11}{8} = \frac{7}{8} + \frac{1}{8} + \frac{3}{8}$

Lesson 1:   Decompose fractions as a sum of unit fractions using tape diagrams.

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e. $\dfrac{12}{10} = \dfrac{6}{10} + \dfrac{4}{10} + \dfrac{2}{10}$

f. $\dfrac{15}{12} = \dfrac{8}{12} + \dfrac{3}{12} + \dfrac{4}{12}$

g. $1\dfrac{2}{3} = 1 + \dfrac{2}{3}$

h. $1\dfrac{5}{8} = 1 + \dfrac{1}{8} + \dfrac{1}{8} + \dfrac{3}{8}$

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Lesson 1:   Decompose fractions as a sum of unit fractions using tape diagrams.

5

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Mrs. Salcido cut a small birthday cake into 6 equal pieces for 6 children. One child was not hungry, so she gave the birthday boy the extra piece. Draw a tape diagram to show how much cake each of the five children received.

_____

_____

_____

_____

Read   **Draw**   **Write**

Name _____   Date _____

1. Step 1: Draw and shade a tape diagram of the given fraction.

   Step 2: Record the decomposition as a sum of unit fractions.

   Step 3: Record the decomposition of the fraction two more ways.

   (The first one has been done for you.)

   a. $\frac{5}{8}$

   1
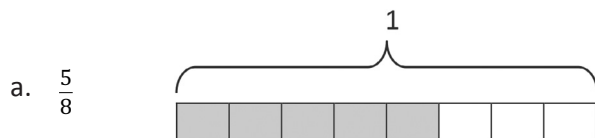
   $$\frac{5}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} \qquad \frac{5}{8} = \frac{2}{8} + \frac{2}{8} + \frac{1}{8} \qquad \frac{5}{8} = \frac{2}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$$

   b. $\frac{9}{10}$

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

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2. Step 1: Draw and shade a tape diagram of the given fraction.
   Step 2: Record the decomposition of the fraction in three different ways using number sentences.

   a. $\frac{7}{8}$

   b. $\frac{5}{3}$

   c. $\frac{7}{5}$

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

Lesson 2: Decompose fractions as a sum of unit fractions using tape diagrams.

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Mrs. Beach prepared copies for 4 reading groups. She made 6 copies for each group. How many copies did Mrs. Beach make?

    a.   Draw a tape diagram.

    b.   Write both an addition and a multiplication sentence to solve.

Read   **Draw**   **Write**

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Lesson 3:   Decompose non-unit fractions and represent them as a whole number times a unit fraction using tape diagrams.

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c.   What fraction of the copies is needed for 3 groups? To show that, shade the tape diagram.

Read   Draw   Write

Lesson 3:   Decompose non-unit fractions and represent them as a whole number
times a unit fraction using tape diagrams.

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Name _____   Date _____

1. Decompose each fraction modeled by a tape diagram as a sum of unit fractions. Write the equivalent multiplication sentence. The first one has been done for you.

    a.

    $\frac{3}{4} = \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$ $\frac{3}{4} = 3 \times \frac{1}{4}$

    b.

    c.

    d.

    e.

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Lesson 3:   Decompose non-unit fractions and represent them as a whole number
times a unit fraction using tape diagrams.

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17
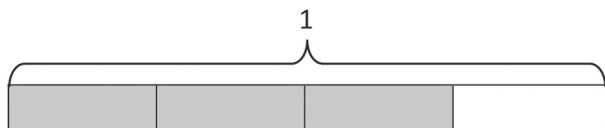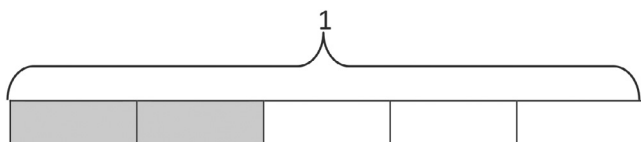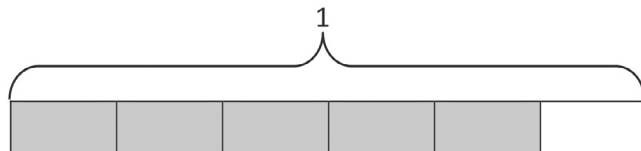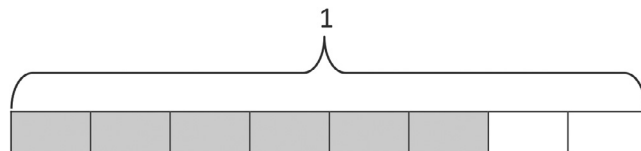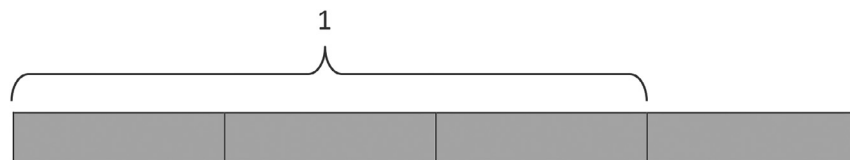
2. Write the following fractions greater than 1 as the sum of two products.

a.

b.
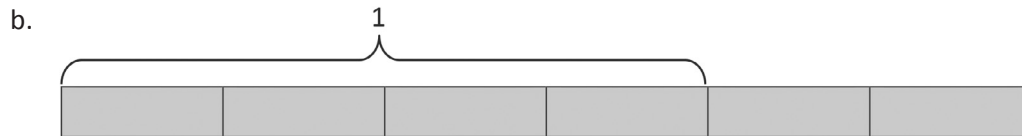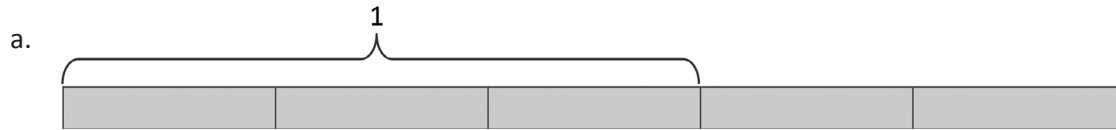
3. Draw a tape diagram, and record the given fraction's decomposition into unit fractions as a multiplication sentence.

a. $\dfrac{4}{5}$

b. $\dfrac{5}{8}$

c. $\dfrac{7}{9}$

d. $\dfrac{7}{4}$

e. $\dfrac{7}{6}$

Lesson 3:   Decompose non-unit fractions and represent them as a whole number times a unit fraction using tape diagrams.

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A recipe calls for $\frac{3}{4}$ cup of milk. Saisha only has a $\frac{1}{4}$-cup measuring cup. If she doubles the recipe, how many times will she need to fill the $\frac{1}{4}$ cup with milk? Draw a tape diagram, and record as a multiplication sentence.

_____

_____

_____

_____

Read   **Draw**   **Write**

EUREKA MATH

Lesson 4:   Decompose fractions into sums of smaller unit fractions using tape diagrams.

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Name _____ Date _____

1. The total length of each tape diagram represents 1. Decompose the shaded unit fractions as the sum of smaller unit fractions in at least two different ways. The first one has been done for you.

   a.

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

   $$\frac{1}{2} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$$

   b.

   c.

   d.

Lesson 4:   Decompose fractions into sums of smaller unit fractions using tape diagrams.

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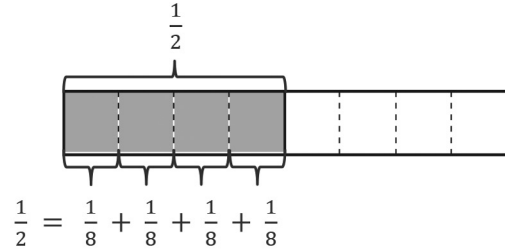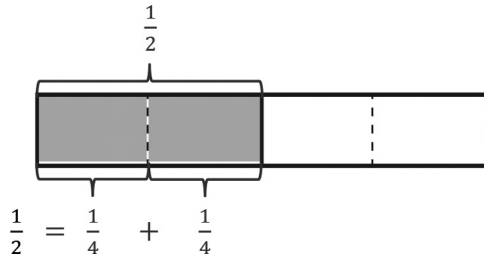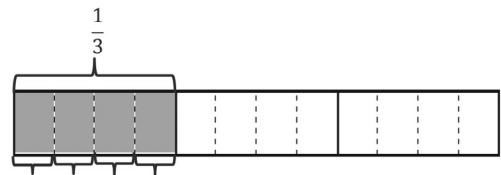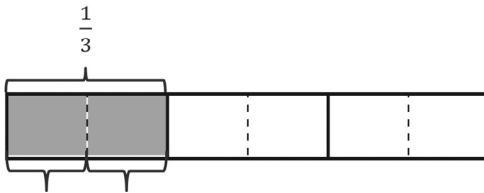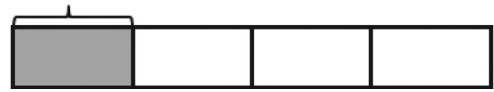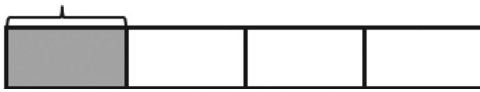
2. The total length of each tape diagram represents 1. Decompose the shaded fractions as the sum of smaller unit fractions in at least two different ways.

a.

b.

3. Draw and label tape diagrams to prove the following statements. The first one has been done for you.

a. $\frac{2}{5} = \frac{4}{10}$

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

$$\frac{4}{10}$$

b. $\frac{2}{6} = \frac{4}{12}$

Lesson 4: Decompose fractions into sums of smaller unit fractions using tape diagrams.

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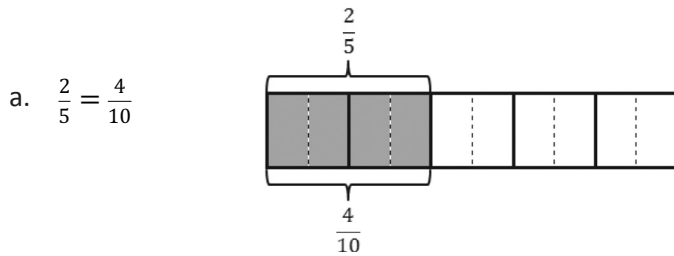
c. $\frac{3}{4} = \frac{6}{8}$

d. $\frac{3}{4} = \frac{9}{12}$

4.   Show that $\frac{1}{2}$ is equivalent to $\frac{4}{8}$ using a tape diagram and a number sentence.

5.   Show that $\frac{2}{3}$ is equivalent to $\frac{6}{9}$ using a tape diagram and a number sentence.

6.   Show that $\frac{4}{6}$ is equivalent to $\frac{8}{12}$ using a tape diagram and a number sentence.

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Lesson 4:   Decompose fractions into sums of smaller unit fractions using tape diagrams.

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A loaf of bread was cut into 6 equal slices. Each of the 6 slices was cut in half to make thinner slices for sandwiches. Mr. Beach used 4 slices. His daughter said, "Wow! You used $\frac{2}{6}$ of the loaf!" His son said, "No. He used $\frac{4}{12}$." Explain who was correct using a tape diagram.

_____

_____

_____

_____

Read   **Draw**   **Write**

EUREKA
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Name _____   Date _____

1. Draw horizontal lines to decompose each rectangle into the number of rows as indicated. Use the model to give the shaded area as both a sum of unit fractions and as a multiplication sentence.

   a. 2 rows
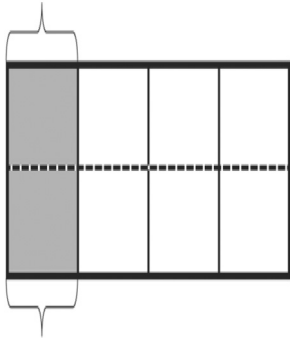
   $$\frac{1}{4} = \frac{2}{\quad}$$
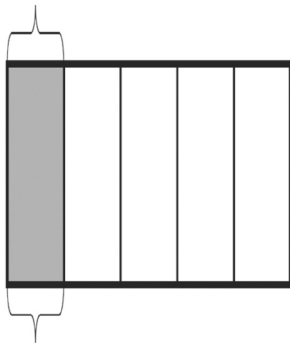
   $$\frac{1}{4} = \frac{1}{8} + \frac{\quad}{\quad} = \frac{\quad}{\quad}$$

   $$\frac{1}{4} = 2 \times \frac{\quad}{\quad} = \frac{\quad}{\quad}$$

   b. 2 rows

   c. 4 rows

Lesson 5: Decompose unit fractions using area models to show equivalence.

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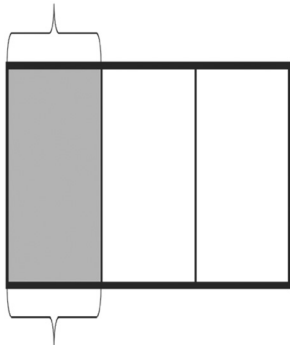
2. Draw area models to show the decompositions represented by the number sentences below. Represent the decomposition as a sum of unit fractions and as a multiplication sentence.

a. $\frac{1}{2} = \frac{3}{6}$

b. $\frac{1}{2} = \frac{4}{8}$

c. $\frac{1}{2} = \frac{5}{10}$

d. $\frac{1}{3} = \frac{2}{6}$

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

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

3. Explain why $\frac{1}{12} + \frac{1}{12} + \frac{1}{12}$ is the same as $\frac{1}{4}$.

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Use area models to prove that $\frac{1}{2} = \frac{2}{4} = \frac{4}{8}$, $\frac{1}{2} = \frac{3}{6} = \frac{6}{12}$, and $\frac{1}{2} = \frac{5}{10}$. What conclusion can you make about $\frac{4}{8}$, $\frac{6}{12}$, and $\frac{5}{10}$? Explain.

_____

_____

_____

_____

Read   **Draw**   **Write**

Lesson 6:   Decompose fractions using area models to show equivalence.

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Name _____   Date _____

1. Each rectangle represents 1. Draw horizontal lines to decompose each rectangle into the fractional units as indicated. Use the model to give the shaded area as a sum and as a product of unit fractions. Use parentheses to show the relationship between the number sentences. The first one has been partially done for you.

a. Sixths

$\frac{2}{3}$

$\frac{}{6}$

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

$$\frac{}{3} + \frac{}{3} = \left(\frac{1}{6} + \frac{1}{6}\right) + \left(\frac{1}{6} + \frac{1}{6}\right) = \frac{4}{}$$

$$\left(\frac{1}{6} + \frac{1}{6}\right) + \left(\frac{1}{6} + \frac{1}{6}\right) = \left(2 \times \frac{}{}\right) + \left(2 \times \frac{}{}\right) = \frac{4}{}$$

$$\frac{2}{3} = 4 \times \frac{}{} = \frac{4}{}$$

b. Tenths

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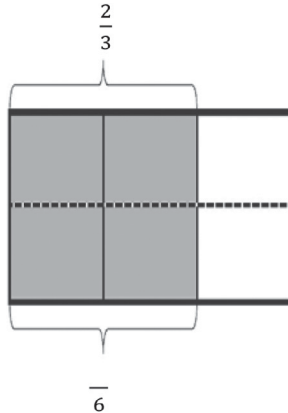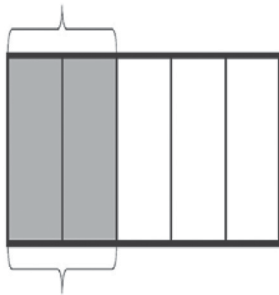
c. Twelfths
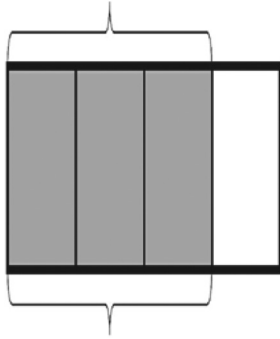
2. Draw area models to show the decompositions represented by the number sentences below. Express each as a sum and product of unit fractions. Use parentheses to show the relationship between the number sentences.

a. $\frac{3}{5} = \frac{6}{10}$

b. $\frac{3}{4} = \frac{6}{8}$

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3. Step 1: Draw an area model for a fraction with units of thirds, fourths, or fifths.

   Step 2: Shade in more than one fractional unit.

   Step 3: Partition the area model again to find an equivalent fraction.

   Step 4: Write the equivalent fractions as a number sentence. (If you've written a number sentence like this one already on this Problem Set, start over.)

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Lesson 6:   Decompose fractions using area models to show equivalence.

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Model an equivalent fraction for $\frac{4}{7}$ using an area model.

Read   **Draw**   **Write**

Lesson 7: Use the area model and multiplication to show the equivalence of two fractions.

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Name _____   Date _____

Each rectangle represents 1.

1. The shaded unit fractions have been decomposed into smaller units. Express the equivalent fractions in a number sentence using multiplication. The first one has been done for you.

a.

$$\frac{1}{2} = \frac{1 \times 2}{2 \times 2} = \frac{2}{4}$$

b.

c.

d.

Lesson 7:   Use the area model and multiplication to show the equivalence of two fractions.

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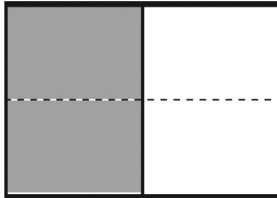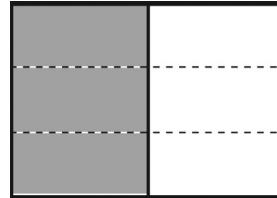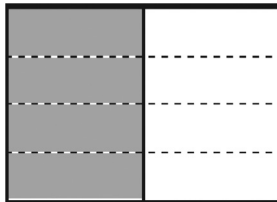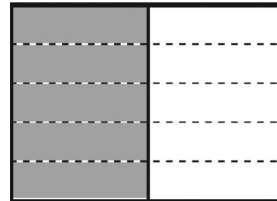
2. Decompose the shaded fractions into smaller units using the area models. Express the equivalent fractions in a number sentence using multiplication.

    a.

    b.

    c.

    d.
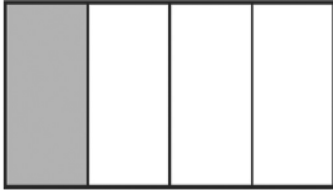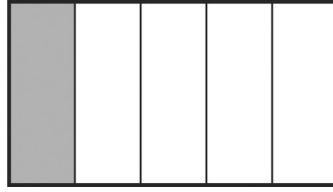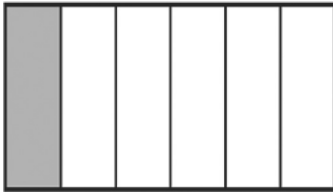
    e.   What happened to the size of the fractional units when you decomposed the fraction?

    f.   What happened to the total number of units in the whole when you decomposed the fraction?

Lesson 7:   Use the area model and multiplication to show the equivalence of two fractions.

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3. Draw three different area models to represent 1 third by shading.
    Decompose the shaded fraction into (a) sixths, (b) ninths, and (c) twelfths.
    Use multiplication to show how each fraction is equivalent to 1 third.

    a.

    b.

    c.

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Lesson 7:   Use the area model and multiplication to show the equivalence of two
             fractions.

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Saisha gives some of her chocolate bar, pictured below, to her younger brother Lucas. He says, "Thanks for $\frac{3}{12}$ of the bar." Saisha responds, "No. I gave you $\frac{1}{4}$ of the bar." Explain why both Lucas and Saisha are correct.

```
 ___ ___ ___ ___
|   |   |   |   |
|CHOCOLATE      |
|___|___|___|___|
|   |   |   |   |
|___|___|___|___|
```

_____

_____

_____

_____

Read   Draw   Write

Lesson 8:   Use the area model and multiplication to show the equivalence of two fractions.

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51
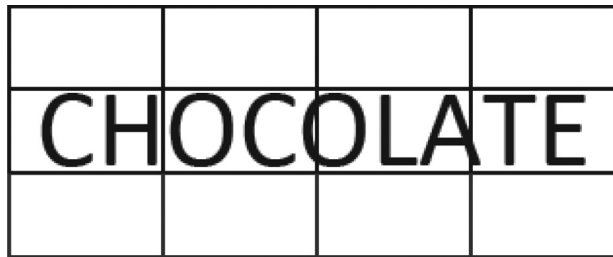
Name _____   Date _____

Each rectangle represents 1.

1. The shaded fractions have been decomposed into smaller units. Express the equivalent fractions in a number sentence using multiplication. The first one has been done for you.

a.
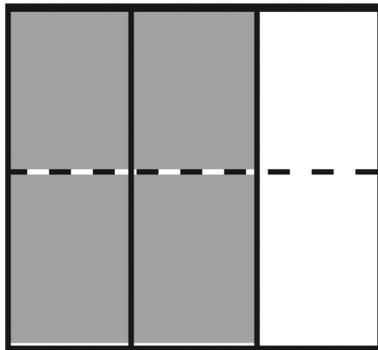
$$\frac{2}{3} = \frac{2 \times 2}{3 \times 2} = \frac{4}{6}$$

b.
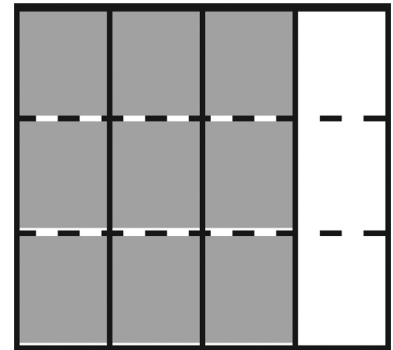
c.
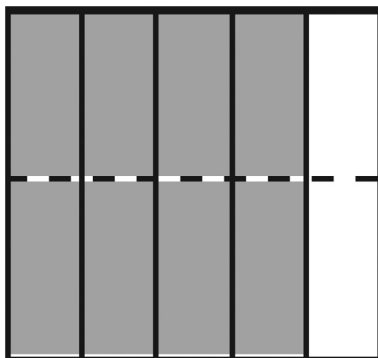
d.
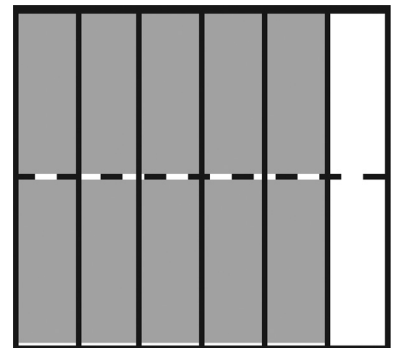
2. Decompose the shaded fractions into smaller units, as given below. Express the equivalent fractions in a number sentence using multiplication.

a. Decompose into tenths.
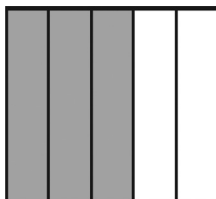
b. Decompose into fifteenths.

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Lesson 8:   Use the area model and multiplication to show the equivalence of two fractions.

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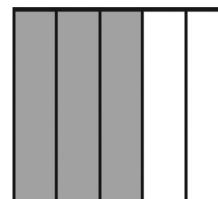
3. Draw area models to prove that the following number sentences are true.

   a. $\frac{2}{5} = \frac{4}{10}$

   b. $\frac{2}{3} = \frac{8}{12}$

   c. $\frac{3}{6} = \frac{6}{12}$

   d. $\frac{4}{6} = \frac{8}{12}$

4. Use multiplication to find an equivalent fraction for each fraction below.

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

   b. $\frac{4}{5}$

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

   d. $\frac{12}{7}$

5. Determine which of the following are true number sentences. Correct those that are false by changing the right-hand side of the number sentence.

   a. $\frac{4}{3} = \frac{8}{9}$

   b. $\frac{5}{4} = \frac{10}{8}$

   c. $\frac{4}{5} = \frac{12}{10}$

   d. $\frac{4}{6} = \frac{12}{18}$

Lesson 8: Use the area model and multiplication to show the equivalence of two fractions.

EUREKA MATH

What fraction of a foot is 1 inch? What fraction of a foot is 3 inches? (Hint: 12 inches = 1 foot.) Draw a tape diagram to model your work.

_____

_____

_____

_____

Read   **Draw**   **Write**

Lesson 9: Use the area model and division to show the equivalence of two fractions.

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Name _____   Date _____

Each rectangle represents 1.

1. Compose the shaded fractions into larger fractional units. Express the equivalent fractions in a number sentence using division. The first one has been done for you.

a.

b.

$$\frac{2}{4} = \frac{2 \div 2}{4 \div 2} = \frac{1}{2}$$

c.

d.

EUREKA MATH   **Lesson 9:**   Use the area model and division to show the equivalence of   **59**
                                       two fractions.

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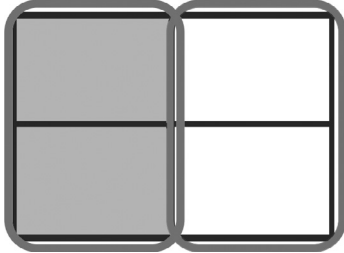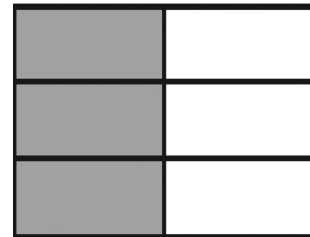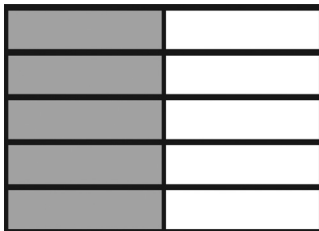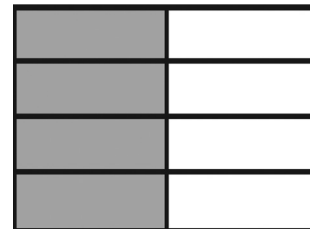
2. Compose the shaded fractions into larger fractional units. Express the equivalent fractions in a number sentence using division.

a.

b.

c.

d.
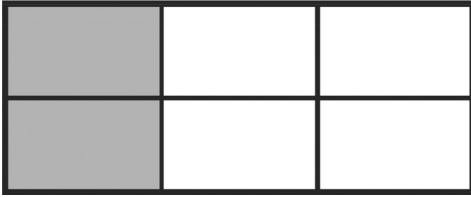
e. What happened to the size of the fractional units when you composed the fraction?

f. What happened to the total number of units in the whole when you composed the fraction?

Lesson 9:   Use the area model and division to show the equivalence of two fractions.

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3. a. In the first area model, show 2 sixths. In the second area model, show 3 ninths. Show how both fractions can be renamed as the same unit fraction.
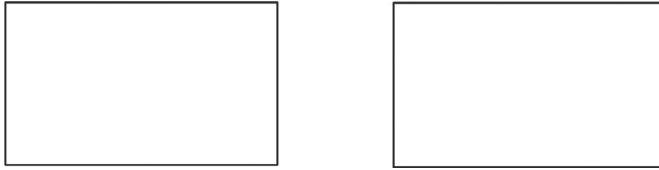
    b. Express the equivalent fractions in a number sentence using division.

4. a. In the first area model, show 2 eighths. In the second area model, show 3 twelfths. Show how both fractions can be composed, or renamed, as the same unit fraction.

    b. Express the equivalent fractions in a number sentence using division.

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Lesson 9:   Use the area model and division to show the equivalence of two fractions.

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Nuri spent $\frac{9}{12}$ of his money on a book and the rest of his money on a pencil.

   a. Express how much of his money he spent on the pencil in fourths.

   b. Nuri started with \$1. How much did he spend on the pencil?

Read   **Draw**   **Write**

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Lesson 10:   Use the area model and division to show the equivalence of two fractions.

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Name _____ Date _____

Each rectangle represents 1.

1. Compose the shaded fraction into larger fractional units. Express the equivalent fractions in a number sentence using division. The first one has been done for you.

a.

$$\frac{4}{6} = \frac{4 \div 2}{6 \div 2} = \frac{2}{3}$$

b.
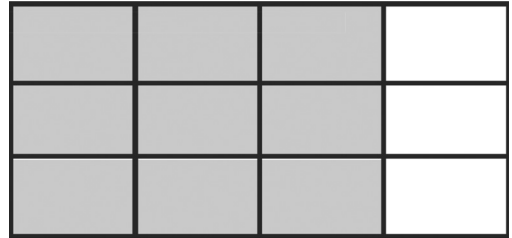
c.
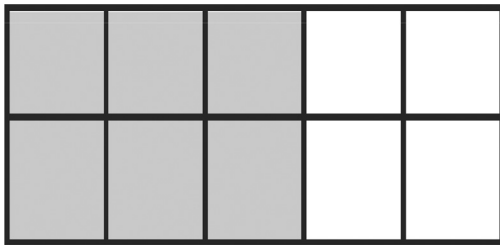
d.
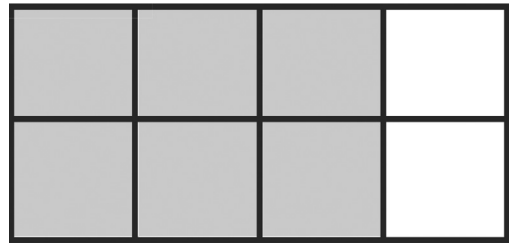
Lesson 10: Use the area model and division to show the equivalence of two fractions.

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2. Compose the shaded fractions into larger fractional units. Express the equivalent fractions in a number sentence using division.

a.
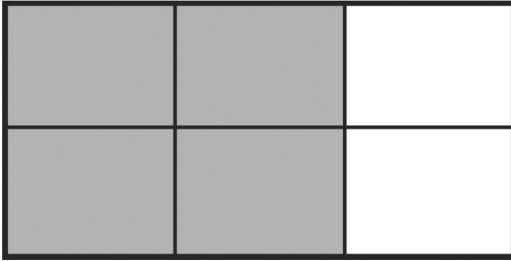
b.
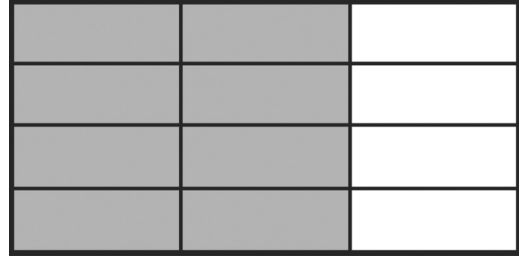
3. Draw an area model to represent each number sentence below.

a. $\dfrac{4}{10} = \dfrac{4 \div 2}{10 \div 2} = \dfrac{2}{5}$

b. $\dfrac{6}{9} = \dfrac{6 \div 3}{9 \div 3} = \dfrac{2}{3}$

Lesson 10:   Use the area model and division to show the equivalence of two fractions.

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4. Use division to rename each fraction given below. Draw a model if that helps you. See if you can use the largest common factor.

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

   b. $\frac{12}{16}$

   c. $\frac{12}{20}$

   d. $\frac{16}{20}$

Lesson 10:   Use the area model and division to show the equivalence of two fractions.

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Kelly was baking bread but could only find her $\frac{1}{8}$-cup measuring cup. She needs $\frac{1}{4}$ cup sugar, $\frac{3}{4}$ cup whole wheat flour, and $\frac{1}{2}$ cup all-purpose flour. How many $\frac{1}{8}$ cups will she need for each ingredient?

_____

_____

_____

_____

Read   **Draw**   **Write**

Lesson 11:   Explain fraction equivalence using a tape diagram and the number
line, and relate that to the use of multiplication and division.

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1. Label each number line with the fractions shown on the tape diagram. Circle the fraction that labels the point on the number line that also names the shaded part of the tape diagram.

    a.

    b.

    c.

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Lesson 11:   Explain fraction equivalence using a tape diagram and the number line, and relate that to the use of multiplication and division.

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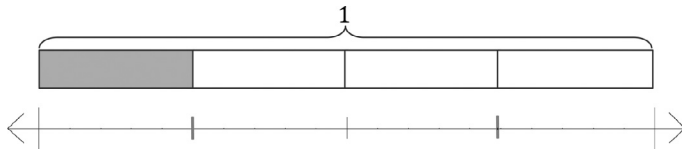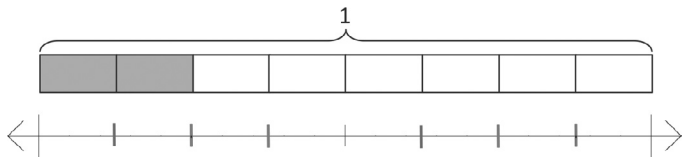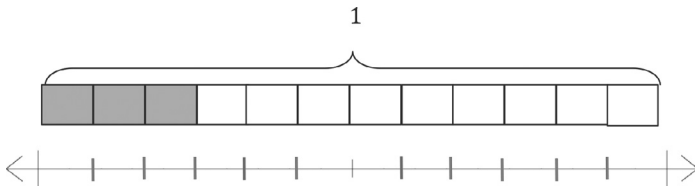
2. Write number sentences using multiplication to show:

    a. The fraction represented in 1(a) is equivalent to the fraction represented in 1(b).

    b. The fraction represented in 1(a) is equivalent to the fraction represented in 1(c).

3. Use each shaded tape diagram below as a ruler to draw a number line. Mark each number line with the fractional units shown on the tape diagram, and circle the fraction that labels the point on the number line that also names the shaded part of the tape diagram.

    a.

    b.

    c.

Lesson 11:   Explain fraction equivalence using a tape diagram and the number
                        line, and relate that to the use of multiplication and division.

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4. Write number sentences using division to show:

    a. The fraction represented in 3(a) is equivalent to the fraction represented in 3(b).

    b. The fraction represented in 3(a) is equivalent to the fraction represented in 3(c).

5. a. Partition a number line from 0 to 1 into fifths. Decompose $\frac{2}{5}$ into 4 equal lengths.

    b. Write a number sentence using multiplication to show what fraction represented on the number line is equivalent to $\frac{2}{5}$.

    c. Write a number sentence using division to show what fraction represented on the number line is equivalent to $\frac{2}{5}$.

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Lesson 11:   Explain fraction equivalence using a tape diagram and the number line, and relate that to the use of multiplication and division.

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Plot $\frac{1}{4}, \frac{4}{5}$, and $\frac{5}{8}$ on a number line, and compare the three points.

Read   **Draw**   **Write**

Lesson 12:   Reason using benchmarks to compare two fractions on the number line.

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Name _____   Date _____

1. a. Plot the following points on the number line without measuring.

    i. $\frac{1}{3}$ ii. $\frac{5}{6}$ iii. $\frac{7}{12}$

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

    b. Use the number line in Part (a) to compare the fractions by writing >, <, or = on the lines.

    i. $\frac{7}{12}$ _____ $\frac{1}{2}$ ii. $\frac{7}{12}$ _____ $\frac{5}{6}$

2. a. Plot the following points on the number line without measuring.

    i. $\frac{11}{12}$ ii. $\frac{1}{4}$ iii. $\frac{3}{8}$

    0 $\frac{1}{2}$ 1
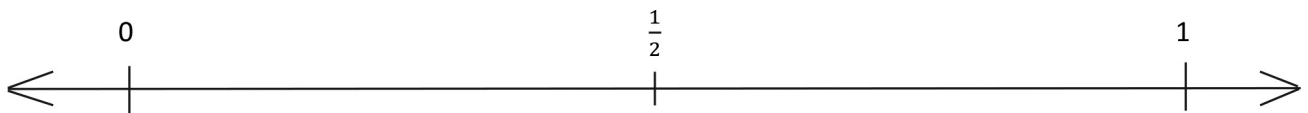
    b. Select two fractions from Part (a), and use the given number line to compare them by writing >, <, or =.

    c. Explain how you plotted the points in Part (a).

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Lesson 12:   Reason using benchmarks to compare two fractions on the number line.

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3. Compare the fractions given below by writing > or < on the lines.

Give a brief explanation for each answer referring to the benchmarks 0, $\frac{1}{2}$, and 1.

a. $\frac{1}{2}$ —————— $\frac{3}{4}$

b. $\frac{1}{2}$ —————— $\frac{7}{8}$

c. $\frac{2}{3}$ —————— $\frac{2}{5}$

d. $\frac{9}{10}$ —————— $\frac{3}{5}$

e. $\frac{2}{3}$ —————— $\frac{7}{8}$

f. $\frac{1}{3}$ —————— $\frac{2}{4}$

g. $\frac{2}{3}$ —————— $\frac{5}{10}$

h. $\frac{11}{12}$ —————— $\frac{2}{5}$

i. $\frac{49}{100}$ —————— $\frac{51}{100}$

j. $\frac{7}{16}$ —————— $\frac{51}{100}$

Lesson 12:   Reason using benchmarks to compare two fractions on the number line.

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Application Problem

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

1.

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

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

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

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

2.

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

number line

Lesson 12:   Reason using benchmarks to compare two fractions on the
number line.

Mr. and Mrs. Reynolds went for a run. Mr. Reynolds ran for $\frac{6}{10}$ mile. Mrs. Reynolds ran for $\frac{2}{5}$ mile.
Who ran farther? Explain how you know. Use the benchmarks 0, $\frac{1}{2}$, and 1 to explain your answer.

Read   **Draw**   **Write**

Lesson 13:   Reason using benchmarks to compare two fractions on the
               number line.

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Name _____   Date _____

1. Place the following fractions on the number line given.

    a. $\frac{4}{3}$ b. $\frac{11}{6}$ c. $\frac{17}{12}$
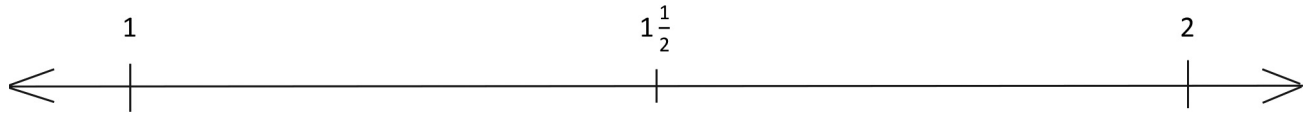
2. Use the number line in Problem 1 to compare the fractions by writing >, <, or = on the lines.

    a. $1\frac{5}{6}$ _____ $1\frac{5}{12}$ b. $1\frac{1}{3}$ _____ $1\frac{5}{12}$

3. Place the following fractions on the number line given.

    a. $\frac{11}{8}$ b. $\frac{7}{4}$ c. $\frac{15}{12}$
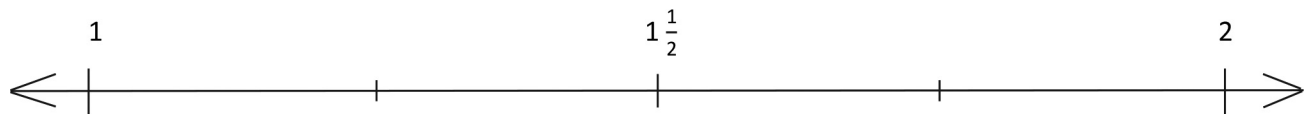
4. Use the number line in Problem 3 to explain the reasoning you used when determining whether $\frac{11}{8}$ or $\frac{15}{12}$ is greater.

Lesson 13:   Reason using benchmarks to compare two fractions on the
              number line.

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5. Compare the fractions given below by writing > or < on the lines. Give a brief explanation for each answer referring to benchmarks.

a. $\dfrac{3}{8}$ _____ $\dfrac{7}{12}$

b. $\dfrac{5}{12}$ _____ $\dfrac{7}{8}$

c. $\dfrac{8}{6}$ _____ $\dfrac{11}{12}$

d. $\dfrac{5}{12}$ _____ $\dfrac{1}{3}$

e. $\dfrac{7}{5}$ _____ $\dfrac{11}{10}$

f. $\dfrac{5}{4}$ _____ $\dfrac{7}{8}$

g. $\dfrac{13}{12}$ _____ $\dfrac{9}{10}$

h. $\dfrac{6}{8}$ _____ $\dfrac{5}{4}$

i. $\dfrac{8}{12}$ _____ $\dfrac{8}{4}$

j. $\dfrac{7}{5}$ _____ $\dfrac{16}{10}$

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blank number lines with midpoint

Lesson 13: Reason using benchmarks to compare two fractions on the number line.

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Compare $\frac{4}{5}, \frac{3}{4}$, and $\frac{9}{10}$ using <, >, or =. Explain your reasoning using a benchmark.

Read   **Draw**   **Write**

Name _____   Date _____

1. Compare the pairs of fractions by reasoning about the size of the units. Use >, <, or =.

    a.   1 fourth _____ 1 fifth   b.   3 fourths _____ 3 fifths

    c.   1 tenth _____ 1 twelfth   d.   7 tenths _____ 7 twelfths

2. Compare by reasoning about the following pairs of fractions with the same or related numerators.
    Use >, <, or =. Explain your thinking using words, pictures, or numbers. Problem 2(b) has been done for
    you.

    a. $\dfrac{3}{5}$ _____ $\dfrac{3}{4}$

    b. $\dfrac{2}{5} < \dfrac{4}{9}$

    because $\dfrac{2}{5} = \dfrac{4}{10}$

    4 tenths is less

    than 4 ninths because

    tenths are smaller than

    ninths.

    $$\dfrac{2}{5} = \dfrac{4}{10}$$

    $$\dfrac{4}{9}$$

    c. $\dfrac{7}{11}$ _____ $\dfrac{7}{13}$

    d. $\dfrac{6}{7}$ _____ $\dfrac{12}{15}$

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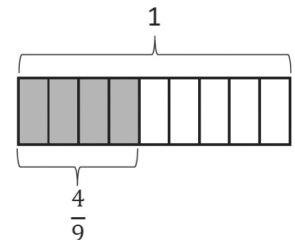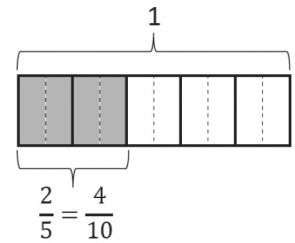
3. Draw two tape diagrams to model each pair of the following fractions with related denominators. Use >, <, or = to compare.

a. $\dfrac{2}{3}$ _____ $\dfrac{5}{6}$

b. $\dfrac{3}{4}$ _____ $\dfrac{7}{8}$

c. $1\dfrac{3}{4}$ _____ $1\dfrac{7}{12}$

       Lesson 14:   Find common units or number of units to compare two fractions.

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4. Draw one number line to model each pair of fractions with related denominators. Use >, <, or = to compare.

a. $\frac{2}{3}$ _____ $\frac{5}{6}$

b. $\frac{3}{8}$ _____ $\frac{1}{4}$

c. $\frac{2}{6}$ _____ $\frac{5}{12}$

d. $\frac{8}{9}$ _____ $\frac{2}{3}$

5. Compare each pair of fractions using >, <, or =. Draw a model if you choose to.

a. $\frac{3}{4}$ _____ $\frac{3}{7}$

b. $\frac{4}{5}$ _____ $\frac{8}{12}$

c. $\frac{7}{10}$ _____ $\frac{3}{5}$

d. $\frac{2}{3}$ _____ $\frac{11}{15}$

e. $\frac{3}{4}$ _____ $\frac{11}{12}$

f. $\frac{7}{3}$ _____ $\frac{7}{4}$

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

h. $1\frac{2}{3}$ _____ $1\frac{4}{7}$

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6. Timmy drew the picture to the right and claimed that $\frac{2}{3}$ is less than $\frac{7}{12}$.
    Evan says he thinks $\frac{2}{3}$ is greater than $\frac{7}{12}$. Who is correct? Support your
    answer with a picture.

Lesson 14:   Find common units or number of units to compare two fractions.

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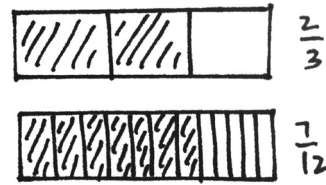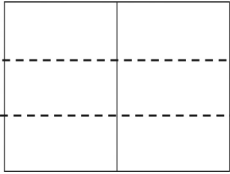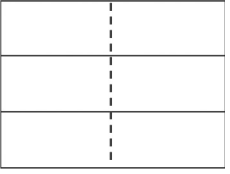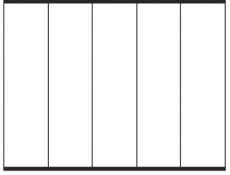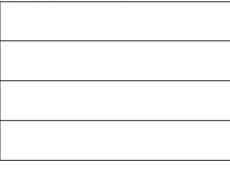
Jamal ran $\frac{2}{3}$ mile. Ming ran $\frac{2}{4}$ mile. Laina ran $\frac{7}{12}$ mile. Who ran the farthest? What do you think is the easiest way to determine the answer to this question?

Read   **Draw**   **Write**

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Lesson 15:   Find common units or number of units to compare two fractions.

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Name _____ Date _____

1. Draw an area model for each pair of fractions, and use it to compare the two fractions by writing >, <, or = on the line. The first two have been partially done for you. Each rectangle represents 1.

a. $\dfrac{1}{2}$ _____ < _____ $\dfrac{2}{3}$

$\dfrac{1 \times 3}{2 \times 3} = \dfrac{3}{6}$

$\dfrac{2 \times 2}{3 \times 2} = \dfrac{4}{6}$

b. $\dfrac{4}{5}$ _____ $\dfrac{3}{4}$

c. $\dfrac{3}{5}$ _____ $\dfrac{4}{7}$

d. $\dfrac{3}{7}$ _____ $\dfrac{2}{6}$

e. $\dfrac{5}{8}$ _____ $\dfrac{6}{9}$

f. $\dfrac{2}{3}$ _____ $\dfrac{3}{4}$

Lesson 15: Find common units or number of units to compare two fractions.

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2. Rename the fractions, as needed, using multiplication in order to compare each pair of fractions by writing >, <, or =.

   a. $\dfrac{3}{5}$ _____ $\dfrac{5}{6}$

                                               b. $\dfrac{2}{6}$ _____ $\dfrac{3}{8}$

   c. $\dfrac{7}{5}$ _____ $\dfrac{10}{8}$

                                               d. $\dfrac{4}{3}$ _____ $\dfrac{6}{5}$

3. Use any method to compare the fractions. Record your answer using >, <, or =.

   a. $\dfrac{3}{4}$ _____ $\dfrac{7}{8}$

                                               b. $\dfrac{6}{8}$ _____ $\dfrac{3}{5}$

   c. $\dfrac{6}{4}$ _____ $\dfrac{8}{6}$

                                               d. $\dfrac{8}{5}$ _____ $\dfrac{9}{6}$

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4. Explain two ways you have learned to compare fractions. Provide evidence using words, pictures, or numbers.

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Lesson 15: Find common units or number of units to compare two fractions.

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Keisha ran $\frac{5}{6}$ mile in the morning and $\frac{2}{3}$ mile in the afternoon. Did Keisha run farther in the morning or in the afternoon? Explain.

_____

_____

_____

_____

Read   **Draw**   **Write**

Lesson 16:   Use visual models to add and subtract two fractions with the same units.

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Name _____   Date _____

1. Solve.

    a. 3 fifths − 1 fifth = _____   b. 5 fifths − 3 fifths = _____

    c. 3 halves − 2 halves = _____   d. 6 fourths − 3 fourths = _____

2. Solve.

    a. $\frac{5}{6} - \frac{3}{6}$ b. $\frac{6}{8} - \frac{4}{8}$

    c. $\frac{3}{10} - \frac{3}{10}$ d. $\frac{5}{5} - \frac{4}{5}$

    e. $\frac{5}{4} - \frac{4}{4}$ f. $\frac{5}{4} - \frac{3}{4}$

3. Solve. Use a number bond to show how to convert the difference to a mixed number. Problem (a) has been completed for you.

    a. $\frac{12}{8} - \frac{3}{8} = \frac{9}{8} = 1\frac{1}{8}$ b. $\frac{12}{6} - \frac{5}{6}$
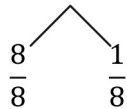
    c. $\frac{9}{5} - \frac{3}{5}$ d. $\frac{14}{8} - \frac{3}{8}$

    e. $\frac{8}{4} - \frac{2}{4}$ f. $\frac{15}{10} - \frac{3}{10}$

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Lesson 16:   Use visual models to add and subtract two fractions with the same units.

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4. Solve. Write the sum in unit form.

   a.   2 fourths + 1 fourth = _____   b.   4 fifths + 3 fifths = _____

5. Solve.

   a. $\frac{2}{8} + \frac{5}{8}$ b. $\frac{4}{12} + \frac{5}{12}$

6. Solve. Use a number bond to decompose the sum. Record your final answer as a mixed number.
   Problem (a) has been completed for you.

   a. $\frac{3}{5} + \frac{4}{5} = \frac{7}{5} = 1\frac{2}{5}$ b. $\frac{4}{4} + \frac{3}{4}$

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

   c. $\frac{6}{9} + \frac{6}{9}$ d. $\frac{7}{10} + \frac{6}{10}$

   e. $\frac{5}{6} + \frac{7}{6}$ f. $\frac{9}{8} + \frac{5}{8}$

7. Solve. Use a number line to model your answer.

   a. $\frac{7}{4} - \frac{5}{4}$

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

Lesson 16:   Use visual models to add and subtract two fractions with the same
                                    units.

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Name _____   Date _____

blank number lines

Lesson 16: Use visual models to add and subtract two fractions with the same units.

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Use a number bond to show the relationship between $\frac{2}{3}$, $\frac{3}{6}$, and $\frac{5}{6}$. Then, use the fractions to write two addition and two subtraction sentences.

Read   Draw   Write

Lesson 17:   Use visual models to add and subtract two fractions with the same   **121**
units, including subtracting from one whole.

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Name _____ Date _____

1. Use the following three fractions to write two subtraction and two addition number sentences.

a. $\frac{8}{5}, \frac{2}{5}, \frac{10}{5}$	b. $\frac{15}{8}, \frac{7}{8}, \frac{8}{8}$

2. Solve. Model each subtraction problem with a number line, and solve by both counting up and subtracting. Part (a) has been completed for you.

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

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

b. $1 - \frac{8}{10}$
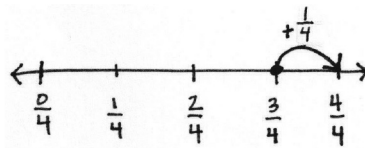
c. $1 - \frac{3}{5}$

d. $1 - \frac{5}{8}$

e. $1\frac{2}{10} - \frac{7}{10}$

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

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Lesson 17: Use visual models to add and subtract two fractions with the same units, including subtracting from one whole.

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3. Find the difference in two ways. Use number bonds to decompose the total. Part (a) has been completed for you.

a. $1\frac{2}{5} - \frac{4}{5}$

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

$\frac{5}{5} + \frac{2}{5} = \frac{7}{5}$

$\frac{7}{5} - \frac{4}{5} = \boxed{\frac{3}{5}}$

$\frac{5}{5} - \frac{4}{5} = \frac{1}{5}$

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

b. $1\frac{3}{6} - \frac{4}{6}$

c. $1\frac{6}{8} - \frac{7}{8}$

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

e. $1\frac{3}{12} - \frac{6}{12}$

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Name _____ Date _____

1. Show one way to solve each problem. Express sums and differences as a mixed number when possible. Use number bonds when it helps you. Part (a) is partially completed.

a. $\frac{2}{5} + \frac{3}{5} + \frac{1}{5}$ $= \frac{5}{5} + \frac{1}{5} = 1 + \frac{1}{5}$ $= \underline{\quad\quad}$	b. $\frac{3}{6} + \frac{1}{6} + \frac{3}{6}$	c. $\frac{5}{7} + \frac{7}{7} + \frac{2}{7}$
d. $\frac{7}{8} - \frac{3}{8} - \frac{1}{8}$	e. $\frac{7}{9} + \frac{1}{9} + \frac{4}{9}$	f. $\frac{4}{10} + \frac{11}{10} + \frac{5}{10}$
g. $1 - \frac{3}{12} - \frac{4}{12}$	h. $1\frac{2}{3} - \frac{1}{3} - \frac{1}{3}$	i. $\frac{10}{12} + \frac{5}{12} + \frac{2}{12} + \frac{7}{12}$

2. Monica and Stuart used different strategies to solve $\frac{5}{8} + \frac{2}{8} + \frac{5}{8}$.

Monica's Way	**Stuart's Way**

$$\frac{5}{8} + \frac{2}{8} + \frac{5}{8} = \frac{7}{8} + \frac{5}{8} = \frac{8}{8} + \frac{4}{8} = 1\frac{4}{8}$$

$$\frac{1}{8} \qquad \frac{4}{8}$$

$$\frac{5}{8} + \frac{2}{8} + \frac{5}{8} = \frac{12}{8} = 1 + \frac{4}{8} = 1\frac{4}{8}$$

$$\frac{8}{8} \qquad \frac{4}{8}$$

Whose strategy do you like best? Why?

3. You gave one solution for each part of Problem 1. Now, for each problem indicated below, give a different solution method.

1(c) $\qquad \frac{5}{7} + \frac{7}{7} + \frac{2}{7}$

1(f) $\qquad \frac{4}{10} + \frac{11}{10} + \frac{5}{10}$

1(g) $\qquad 1 - \frac{3}{12} - \frac{4}{12}$

Lesson 18:   Add and subtract more than two fractions.

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Fractions are all around us! Make a list of times that you have used fractions, heard fractions, or seen fractions. Be ready to share your ideas.

_____

_____

_____

_____

Read   **Draw**   **Write**

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Lesson 19:   Solve word problems involving addition and subtraction of fractions.

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Name _____ Date _____

Use the RDW process to solve.

1. Sue ran $\frac{9}{10}$ mile on Monday and $\frac{7}{10}$ mile on Tuesday. How many miles did Sue run in the 2 days?

2. Mr. Salazar cut his son's birthday cake into 8 equal pieces. Mr. Salazar, Mrs. Salazar, and the birthday boy each ate 1 piece of cake. What fraction of the cake was left?

3. Maria spent $\frac{4}{7}$ of her money on a book and saved the rest. What fraction of her money did Maria save?

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Lesson 19:   Solve word problems involving addition and subtraction of fractions.

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4. Mrs. Jones had $1\frac{4}{8}$ pizzas left after a party. After giving some to Gary, she had $\frac{7}{8}$ pizza left. What fraction of a pizza did she give Gary?

5. A baker had 2 pans of corn bread. He served $1\frac{1}{4}$ pans. What fraction of a pan was left?

6. Marius combined $\frac{4}{8}$ gallon of lemonade, $\frac{3}{8}$ gallon of cranberry juice, and $\frac{6}{8}$ gallon of soda water to make punch for a party. How many gallons of punch did he make in all?

Lesson 19:   Solve word problems involving addition and subtraction of fractions.

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Krista drank $\frac{3}{16}$ of the water in her water bottle in the morning, $\frac{5}{16}$ in the afternoon, and $\frac{3}{16}$ in the evening. What fraction of water was left at the end of the day?

_____

_____

_____

_____

Read   **Draw**   **Write**

Lesson 20:   Use visual models to add two fractions with related units using the denominators 2, 3, 4, 5, 6, 8, 10, and 12.

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Name _____   Date _____

1. Use a tape diagram to represent each addend. Decompose one of the tape diagrams to make like units. Then, write the complete number sentence. Part (a) is partially completed.

   a. $\frac{1}{4} + \frac{1}{8}$

   b. $\frac{1}{4} + \frac{1}{12}$
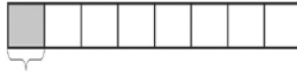
   $$\frac{}{8} + \frac{}{8} = \frac{}{8}$$

   c. $\frac{2}{6} + \frac{1}{3}$

   d. $\frac{1}{2} + \frac{3}{8}$

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

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

Lesson 20:   Use visual models to add two fractions with related units using the denominators 2, 3, 4, 5, 6, 8, 10, and 12.

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2. Estimate to determine if the sum is between 0 and 1 or 1 and 2. Draw a number line to model the addition. Then, write a complete number sentence. Part (a) has been completed for you.

a. $\frac{1}{2} + \frac{1}{4}$ $\frac{2}{4} + \frac{1}{4} = \frac{3}{4}$

b. $\frac{1}{2} + \frac{4}{10}$
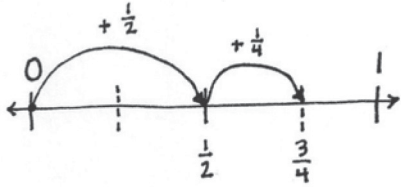
c. $\frac{6}{10} + \frac{1}{2}$

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

e. $\frac{3}{4} + \frac{6}{8}$

f. $\frac{4}{10} + \frac{6}{5}$

3. Solve the following addition problem without drawing a model. Show your work.

$$\frac{2}{3} + \frac{4}{6}$$

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Two-fifths liter of chemical A was added to $\frac{7}{10}$ liter of chemical B to make chemical C. How many liters of chemical C are there?

<p style="text-align:center">_____</p>

<p style="text-align:center">_____</p>

<p style="text-align:center">_____</p>

<p style="text-align:center">_____</p>

<p style="text-align:center">**Read**   **Draw**   **Write**</p>

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Lesson 21:   Use visual models to add two fractions with related units using the
              denominators 2, 3, 4, 5, 6, 8, 10, and 12.

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1. Draw a tape diagram to represent each addend. Decompose one of the tape diagrams to make like units. Then, write a complete number sentence. Use a number bond to write each sum as a mixed number.

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

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

   c. $\frac{5}{6} + \frac{1}{3}$

   d. $\frac{4}{5} + \frac{7}{10}$

2. Draw a number line to model the addition. Then, write a complete number sentence. Use a number bond to write each sum as a mixed number.

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

   b. $\frac{1}{2} + \frac{6}{8}$

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Lesson 21: Use visual models to add two fractions with related units using the denominators 2, 3, 4, 5, 6, 8, 10, and 12.

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c. $\frac{7}{10} + \frac{3}{5}$

d. $\frac{2}{3} + \frac{5}{6}$

3. Solve. Write the sum as a mixed number. Draw a model if needed.

a. $\frac{3}{4} + \frac{2}{8}$

b. $\frac{4}{6} + \frac{1}{2}$

c. $\frac{4}{6} + \frac{2}{3}$

d. $\frac{8}{10} + \frac{3}{5}$

e. $\frac{5}{8} + \frac{3}{4}$

f. $\frac{5}{8} + \frac{2}{4}$

g. $\frac{1}{2} + \frac{5}{8}$

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

Lesson 21: Use visual models to add two fractions with related units using the denominators 2, 3, 4, 5, 6, 8, 10, and 12.

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Winnie went shopping and spent $\frac{2}{5}$ of the money that was on a gift card. What fraction of the money was left on the card? Draw a number line and a number bond to help show your thinking.

_____

_____

_____

_____

Read   **Draw**   **Write**

Lesson 22:   Add a fraction less than 1 to, or subtract a fraction less than 1 from, a whole number using decomposition and visual models.

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Name _____ Date _____

1. Draw a tape diagram to match each number sentence. Then, complete the number sentence.

   a. $3 + \dfrac{1}{3} = $ _____

   b. $4 + \dfrac{3}{4} = $ _____

   c. $3 - \dfrac{1}{4} = $ _____

   d. $5 - \dfrac{2}{5} = $ _____

2. Use the following three numbers to write two subtraction and two addition number sentences.

   a. $6, \ 6\dfrac{3}{8}, \ \dfrac{3}{8}$

   b. $\dfrac{4}{7}, \ 9, \ 8\dfrac{3}{7}$

3. Solve using a number bond. Draw a number line to represent each number sentence. The first one has been done for you.

   a. $4 - \dfrac{1}{3} = 3\dfrac{2}{3}$

   b. $5 - \dfrac{2}{3} = $ _____

   $4 - \frac{1}{3} = 3\frac{2}{3}$

   $3 \quad \frac{3}{3}$

   (number line showing 3, $3\frac{1}{3}$, $3\frac{2}{3}$, 4)

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Lesson 22: Add a fraction less than 1 to, or subtract a fraction less than 1 from, a whole number using decomposition and visual models.

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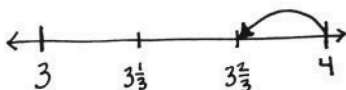
c. $7 - \dfrac{3}{8} =$ _____

d. $10 - \dfrac{4}{10} =$ _____

4. Complete the subtraction sentences using number bonds.

a. $3 - \dfrac{1}{10} =$ _____

b. $5 - \dfrac{3}{4} =$ _____

c. $6 - \dfrac{5}{8} =$ _____

d. $7 - \dfrac{3}{9} =$ _____

e. $8 - \dfrac{6}{10} =$ _____

f. $29 - \dfrac{9}{12} =$ _____

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Mrs. Wilcox cut quilt squares and then divided them evenly into 8 piles. She decided to sew together 1 pile each night. After 5 nights, what fraction of the quilt squares was sewn together? Draw a tape diagram or a number line to model your thinking, and then write a number sentence to express your answer.

_____

_____

_____

_____

Read   Draw   Write

Lesson 23:   Add and multiply unit fractions to build fractions greater than 1 using visual models.

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Name _____   Date _____

1. Circle any fractions that are equivalent to a whole number. Record the whole number below the fraction.

    a. Count by 1 thirds. Start at 0 thirds. End at 6 thirds.

    $\left(\dfrac{0}{3}\right)$, $\dfrac{1}{3}$,

    0

    b. Count by 1 halves. Start at 0 halves. End at 8 halves.

2. Use parentheses to show how to make ones in the following number sentence.

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

3. Multiply, as shown below. Draw a number line to support your answer.

    a. $6 \times \dfrac{1}{3}$

    $$6 \times \frac{1}{3} = 2 \times \frac{3}{3} = 2$$

    b. $6 \times \dfrac{1}{2}$

    c. $12 \times \dfrac{1}{4}$

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Lesson 23:   Add and multiply unit fractions to build fractions greater than 1 using visual models.

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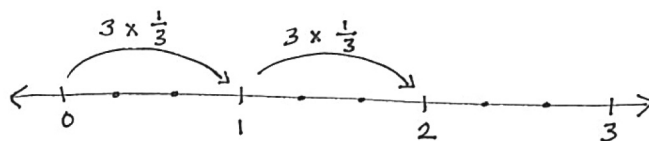
4. Multiply, as shown below. Write the product as a mixed number. Draw a number line to support your answer.

   a. 7 copies of 1 third
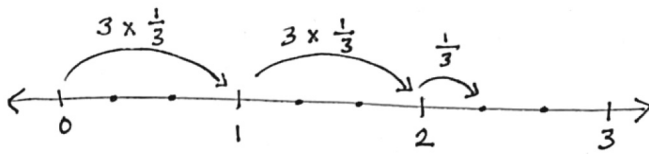
$$7 \times \frac{1}{3} = \left(2 \times \frac{3}{3}\right) + \frac{1}{3} = 2 + \frac{1}{3} = 2\frac{1}{3}$$

   b. 7 copies of 1 half

   c. $10 \times \frac{1}{4}$

   d. $14 \times \frac{1}{3}$

Lesson 23: Add and multiply unit fractions to build fractions greater than 1 using visual models.

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Shelly read her book for $\frac{1}{2}$ hour each afternoon for 9 days. How many hours did Shelly spend reading in all 9 days?

_____

_____

_____

_____

Read   **Draw**   **Write**

Lesson 24:   Decompose and compose fractions greater than 1 to express them in various forms.

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Name _____ Date _____

1. Rename each fraction as a mixed number by decomposing it into two parts as shown below. Model the decomposition with a number line and a number bond.

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

   $$\frac{11}{3} = \frac{9}{3} + \frac{2}{3} = 3 + \frac{2}{3} = 3\frac{2}{3}$$

   b. $\frac{12}{5}$

   c. $\frac{13}{2}$

   d. $\frac{15}{4}$

EUREKA MATH · **Lesson 24:** Decompose and compose fractions greater than 1 to express them in various forms. · **165**

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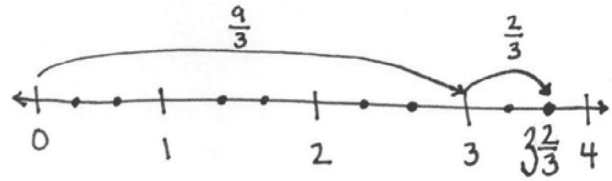
2. Convert each fraction to a mixed number. Show your work as in the example. Model with a number line.

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

$\frac{11}{3} = \frac{3 \times 3}{3} + \frac{2}{3} = 3 + \frac{2}{3} = 3\frac{2}{3}$
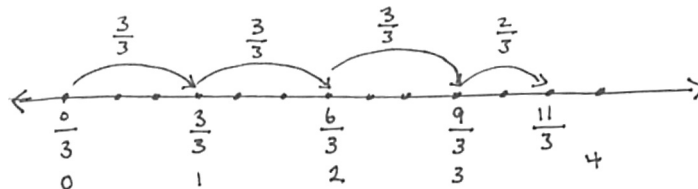
b. $\frac{9}{2}$

c. $\frac{17}{4}$

3. Convert each fraction to a mixed number.

a. $\frac{9}{4} =$	b. $\frac{17}{5} =$	c. $\frac{25}{6} =$
d. $\frac{30}{7} =$	e. $\frac{38}{8} =$	f. $\frac{48}{9} =$
g. $\frac{63}{10} =$	h. $\frac{84}{10} =$	i. $\frac{37}{12} =$

Lesson 24: Decompose and compose fractions greater than 1 to express them in various forms.

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Mrs. Fowler knew that the perimeter of the soccer field was $\frac{1}{6}$ mile. Her goal was to walk two miles while watching her daughter's game. If she walked around the field 13 times, did she meet her goal? Explain your thinking.

_____

_____

_____

_____

Read   **Draw**   **Write**

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Lesson 25:   Decompose and compose fractions greater than 1 to express them in various forms.

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Name _____ Date _____

1. Convert each mixed number to a fraction greater than 1. Draw a number line to model your work.

   a. $3\frac{1}{4}$
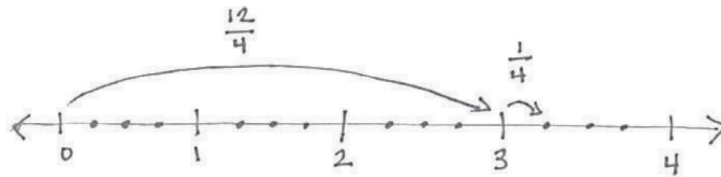
   $3\frac{1}{4} = 3 + \frac{1}{4} = \frac{12}{4} + \frac{1}{4} = \frac{13}{4}$

   b. $2\frac{4}{5}$

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

   d. $4\frac{4}{10}$

   e. $4\frac{7}{9}$

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Lesson 25: Decompose and compose fractions greater than 1 to express them in various forms.

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2. Convert each mixed number to a fraction greater than 1. Show your work as in the example.
(Note: $3 \times \frac{4}{4} = \frac{3 \times 4}{4}$.)

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

$$3\frac{3}{4} = 3 + \frac{3}{4} = \left(3 \times \frac{4}{4}\right) + \frac{3}{4} = \frac{12}{4} + \frac{3}{4} = \frac{15}{4}$$

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

c. $4\frac{3}{5}$

d. $4\frac{6}{8}$

3. Convert each mixed number to a fraction greater than 1.

a. $2\frac{3}{4}$	b. $2\frac{2}{5}$	c. $3\frac{3}{6}$
d. $3\frac{3}{8}$	e. $3\frac{1}{10}$	f. $4\frac{3}{8}$
g. $5\frac{2}{3}$	h. $6\frac{1}{2}$	i. $7\frac{3}{10}$

Lesson 25:   Decompose and compose fractions greater than 1 to express them in various forms.

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Barbara needed $3\frac{1}{4}$ cups of flour for her recipe. If she measured $\frac{1}{4}$ cup at a time, how many times did she have to fill the measuring cup?

_____

_____

_____

_____

Read   **Draw**   **Write**

Lesson 26:   Compare fractions greater than 1 by reasoning using benchmark fractions.

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Name _____   Date _____

1. a. Plot the following points on the number line without measuring.

    i. $2\frac{7}{8}$ ii. $3\frac{1}{6}$ iii. $\frac{29}{12}$

2   3   4

    b. Use the number line in Problem 1(a) to compare the fractions by writing >, <, or =.

    i. $\frac{29}{12}$ _____ $2\frac{7}{8}$ ii. $\frac{29}{12}$ _____ $3\frac{1}{6}$

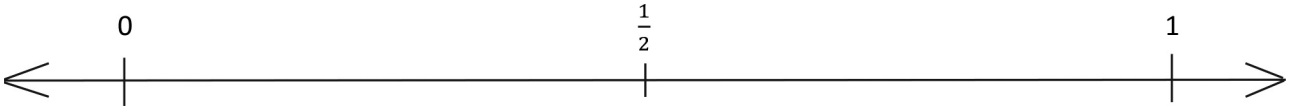2. a. Plot the following points on the number line without measuring.

    i. $\frac{70}{9}$ ii. $8\frac{2}{4}$ iii. $\frac{25}{3}$

7   8   9
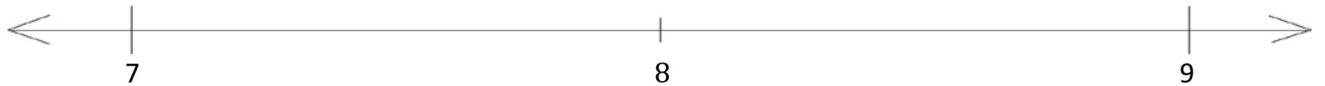
    b. Compare the following by writing >, <, or =.

    i. $8\frac{2}{4}$ _____ $\frac{25}{3}$ ii. $\frac{70}{9}$ _____ $8\frac{2}{4}$

    c. Explain how you plotted the points in Problem 2(a).

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Lesson 26:   Compare fractions greater than 1 by reasoning using benchmark
              fractions.

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3. Compare the fractions given below by writing >, <, or =. Give a brief explanation for each answer, referring to benchmark fractions.

a. $5\frac{1}{3}$ _____ $4\frac{3}{4}$

b. $\frac{12}{6}$ _____ $\frac{25}{12}$

c. $\frac{18}{7}$ _____ $\frac{17}{5}$

d. $5\frac{2}{5}$ _____ $5\frac{5}{8}$

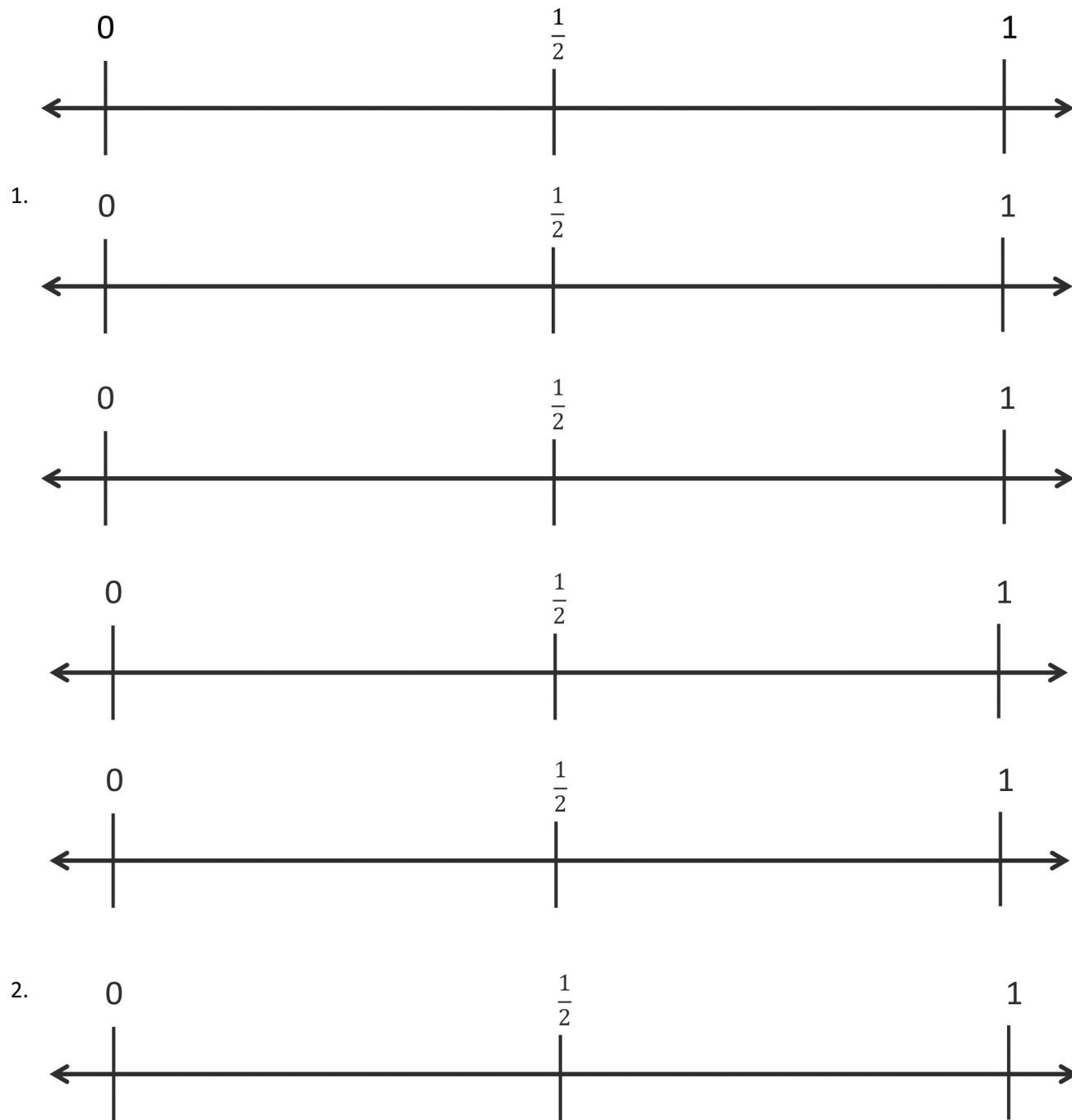e. $6\frac{2}{3}$ _____ $6\frac{3}{7}$

f. $\frac{31}{7}$ _____ $\frac{32}{8}$

g. $\frac{31}{10}$ _____ $\frac{25}{8}$

h. $\frac{39}{12}$ _____ $\frac{19}{6}$

i. $\frac{49}{50}$ _____ $3\frac{90}{100}$

j. $5\frac{5}{12}$ _____ $5\frac{51}{100}$

Lesson 26: Compare fractions greater than 1 by reasoning using benchmark fractions.

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Jeremy ran 27 laps on a track that was $\frac{1}{8}$ mile long. Jimmy ran 15 laps on a track that was $\frac{1}{4}$ mile long. Who ran farther?

_____

_____

_____

_____

Read   **Draw**   **Write**

Lesson 27: Compare fractions greater than 1 by creating common numerators or denominators.

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Name _____   Date _____

1. Draw a tape diagram to model each comparison. Use >, <, or = to compare.

   a. $3\frac{2}{3}$ _____ $3\frac{5}{6}$

   b. $3\frac{2}{5}$ _____ $3\frac{6}{10}$

   c. $4\frac{3}{6}$ _____ $4\frac{1}{3}$

   d. $4\frac{5}{8}$ _____ $\frac{19}{4}$

2. Use an area model to make like units. Then, use >, <, or = to compare.

   a. $2\frac{3}{5}$ _____ $\frac{18}{7}$

   b. $2\frac{3}{8}$ _____ $2\frac{1}{3}$

Lesson 27: Compare fractions greater than 1 by creating common numerators or denominators.

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3. Compare each pair of fractions using >, <, or = using any strategy.

a. $5\frac{3}{4}$ _____ $5\frac{3}{8}$

b. $5\frac{2}{5}$ _____ $5\frac{8}{10}$

c. $5\frac{6}{10}$ _____ $\frac{27}{5}$

d. $5\frac{2}{3}$ _____ $5\frac{9}{15}$

e. $\frac{7}{2}$ _____ $\frac{7}{3}$
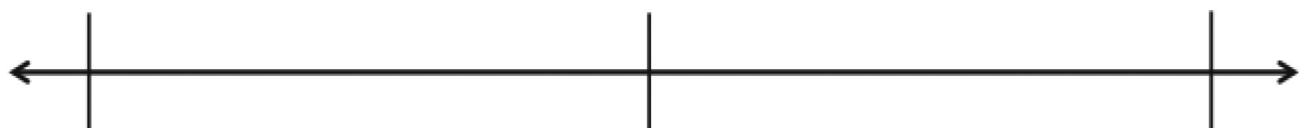
f. $\frac{12}{3}$ _____ $\frac{15}{4}$

g. $\frac{22}{5}$ _____ $4\frac{2}{7}$

h. $\frac{21}{4}$ _____ $5\frac{2}{5}$

i. $\frac{29}{8}$ _____ $\frac{11}{3}$

j. $3\frac{3}{4}$ _____ $3\frac{4}{7}$

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MATH

Name _____   Date _____

1. The chart to the right shows the distance fourth graders in Ms. Smith's class were able to run before stopping for a rest. Create a line plot to display the data in the table.

Student	Distance (in miles)
Joe	$2\frac{1}{2}$
Arianna	$1\frac{3}{4}$
Bobbi	$2\frac{1}{8}$
Morgan	$1\frac{5}{8}$
Jack	$2\frac{5}{8}$
Saisha	$2\frac{1}{4}$
Tyler	$2\frac{2}{4}$
Jenny	$\frac{5}{8}$
Anson	$2\frac{2}{8}$
Chandra	$2\frac{4}{8}$

2. Solve each problem.

   a. Who ran a mile farther than Jenny?

   b. Who ran a mile less than Jack?

   c. Two students ran exactly $2\frac{1}{4}$ miles. Identify the students. How many quarter miles did each student run?

   d. What is the difference, in miles, between the longest and shortest distance run?

   e. Compare the distances run by Arianna and Morgan using >, <, or =.

   f. Ms. Smith ran twice as far as Jenny. How far did Ms. Smith run? Write her distance as a mixed number.

   g. Mr. Reynolds ran $1\frac{3}{10}$ miles. Use >, <, or = to compare the distance Mr. Reynolds ran to the distance that Ms. Smith ran. Who ran farther?

3. Using the information in the table and on the line plot, develop and write a question similar to those above. Solve, and then ask your partner to solve. Did you solve in the same way? Did you get the same answer?

Lesson 28:   Solve word problems with line plots.

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Both Allison and Jennifer jogged on Sunday. When asked about their distances, Allison said,
"I ran $2\frac{7}{8}$ miles this morning and $3\frac{3}{8}$ miles this afternoon. So, I ran a total of about 6 miles,"
and Jennifer said, "I ran $3\frac{1}{10}$ miles this morning and $3\frac{3}{10}$ miles this evening. I ran a total of
$6\frac{4}{10}$ miles." How do their answers differ?

_____

_____

_____

_____

Read   Draw   Write

Name _____   Date _____

1. Estimate each sum or difference to the nearest half or whole number by rounding. Explain your estimate using words or a number line.

   a. $2\frac{1}{12} + 1\frac{7}{8} \approx$ _____

   b. $1\frac{11}{12} + 5\frac{3}{4} \approx$ _____

   c. $8\frac{7}{8} - 2\frac{1}{9} \approx$ _____

   d. $6\frac{1}{8} - 2\frac{1}{12} \approx$ _____

   e. $3\frac{3}{8} + 5\frac{1}{9} \approx$ _____

2. Estimate each sum or difference to the nearest half or whole number by rounding. Explain your estimate using words or a number line.

a. $\frac{16}{5} + \frac{11}{4} \approx$ _____

b. $\frac{17}{3} - \frac{15}{7} \approx$ _____

c. $\frac{59}{10} + \frac{26}{10} \approx$ _____

3. Montoya's estimate for $8\frac{5}{8} - 2\frac{1}{3}$ was 7. Julio's estimate was $6\frac{1}{2}$. Whose estimate do you think is closer to the actual difference? Explain.

4. Use benchmark numbers or mental math to estimate the sum or difference.

a. $14\frac{3}{4} + 29\frac{11}{12}$	b. $3\frac{5}{12} + 54\frac{5}{8}$
c. $17\frac{4}{5} - 8\frac{7}{12}$	d. $\frac{65}{8} - \frac{37}{6}$

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One board measures 2 meters 70 centimeters. Another measures 87 centimeters. What is the total length of the two boards expressed in meters and centimeters?

_____

_____

_____

_____

Read   Draw   Write

Name _____   Date _____

1. Solve.

   a. $3\frac{1}{4} + \frac{1}{4}$

   b. $7\frac{3}{4} + \frac{1}{4}$

   c. $\frac{3}{8} + 5\frac{2}{8}$

   d. $\frac{1}{8} + 6\frac{7}{8}$

2. Complete the number sentences.

a. $4\frac{7}{8} + $ _____ $= 5$	b. $7\frac{2}{5} + $ _____ $= 8$
c. $3 = 2\frac{1}{6} + $ _____	d. $12 = 11\frac{1}{12} + $ _____

3. Use a number bond and the arrow way to show how to make one. Solve.

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

   $\frac{1}{4}$ $\frac{1}{4}$

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

4. Solve.

a. $4\frac{2}{3} + \frac{2}{3}$	b. $3\frac{3}{5} + \frac{4}{5}$
c. $5\frac{4}{6} + \frac{5}{6}$	d. $\frac{7}{8} + 6\frac{4}{8}$
e. $\frac{7}{10} + 7\frac{9}{10}$	f. $9\frac{7}{12} + \frac{11}{12}$
g. $2\frac{70}{100} + \frac{87}{100}$	h. $\frac{50}{100} + 16\frac{78}{100}$

Lesson 30:   Add a mixed number and a fraction.

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5. To solve $7\frac{9}{10} + \frac{5}{10}$, Maria thought, "$7\frac{9}{10} + \frac{1}{10} = 8$ and $8 + \frac{4}{10} = 8\frac{4}{10}$."

Paul thought, "$7\frac{9}{10} + \frac{5}{10} = 7\frac{14}{10} = 7 + \frac{10}{10} + \frac{4}{10} = 8\frac{4}{10}$." Explain why Maria and Paul are both right.

Marta has 2 meters 80 centimeters of cotton cloth and 3 meters 87 centimeters of linen cloth. What is the total length of both pieces of cloth?

Read   Draw   Write

Name _____   Date _____

1. Solve.

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

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

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

   c. $2\frac{2}{6} + 6\frac{4}{6}$

2. Solve. Use a number line to show your work.

   a. $2\frac{4}{5} + 1\frac{2}{5} = 3 + \frac{6}{5} =$ _____

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

   b. $1\frac{3}{4} + 3\frac{3}{4}$

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

3. Solve. Use the arrow way to show how to make one.

a. $2\frac{4}{6} + 1\frac{5}{6} = 3\frac{4}{6} + \frac{5}{6} =$

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

b. $1\frac{3}{4} + 3\frac{3}{4}$

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

4. Solve. Use whichever method you prefer.

a. $1\frac{3}{5} + 3\frac{4}{5}$

b. $2\frac{6}{8} + 3\frac{7}{8}$

c. $3\frac{8}{12} + 2\frac{7}{12}$

Lesson 31: Add mixed numbers.

EUREKA
MATH

Meredith had 2 m 65 cm of ribbon. She used 87 cm of the ribbon. How much ribbon did she have left?

_____

_____

_____

_____

Read   **Draw**   **Write**

Name _____   Date _____

1. Subtract. Model with a number line or the arrow way.

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

b. $4\frac{7}{10} - \frac{3}{10}$

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

d. $9\frac{3}{5} - \frac{4}{5}$

2. Use decomposition to subtract the fractions. Model with a number line or the arrow way.

a. $5\frac{3}{5} - \frac{4}{5}$

$\frac{3}{5} \quad \frac{1}{5}$

b. $4\frac{1}{4} - \frac{2}{4}$

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

d. $2\frac{3}{8} - \frac{5}{8}$

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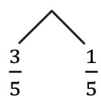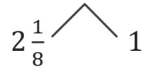
3. Decompose the total to subtract the fractions.

a. $3\frac{1}{8} - \frac{3}{8} = 2\frac{1}{8} + \frac{5}{8} = 2\frac{6}{8}$

$2\frac{1}{8}$ ⌃ 1

b. $5\frac{1}{8} - \frac{7}{8}$

c. $5\frac{3}{5} - \frac{4}{5}$

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

e. $6\frac{4}{12} - \frac{7}{12}$

f. $9\frac{1}{8} - \frac{5}{8}$

g. $7\frac{1}{6} - \frac{5}{6}$

h. $8\frac{3}{10} - \frac{4}{10}$

i. $12\frac{3}{5} - \frac{4}{5}$

j. $11\frac{2}{6} - \frac{5}{6}$

Lesson 32: Subtract a fraction from a mixed number.

EUREKA MATH®

Jeannie's pumpkin had a weight of 3 kg 250 g in August and 4 kg 125 g in October. What was the difference in weight from August to October?

_____

_____

_____

_____

Read   **Draw**   **Write**

EUREKA
MATH®

Name _____ Date _____

1. Write a related addition sentence. Subtract by counting on. Use a number line or the arrow way to help. The first one has been partially done for you.

   a. $3\frac{1}{3} - 1\frac{2}{3} = $ _____

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

   b. $5\frac{1}{4} - 2\frac{3}{4} = $ _____

2. Subtract, as shown in Problem 2(a), by decomposing the fractional part of the number you are subtracting. Use a number line or the arrow way to help you.

   a. $3\frac{1}{4} - 1\frac{3}{4} = 2\frac{1}{4} - \frac{3}{4} = 1\frac{2}{4}$

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

   b. $4\frac{1}{5} - 2\frac{4}{5}$

   c. $5\frac{3}{7} - 3\frac{6}{7}$

3. Subtract, as shown in Problem 3(a), by decomposing to take one out.

a. $5\frac{3}{5} - 2\frac{4}{5} = 3\frac{3}{5} - \frac{4}{5}$

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

b. $4\frac{3}{6} - 3\frac{5}{6}$

c. $8\frac{3}{10} - 2\frac{7}{10}$

4. Solve using any method.

a. $6\frac{1}{4} - 3\frac{3}{4}$

b. $5\frac{1}{8} - 2\frac{7}{8}$

c. $8\frac{3}{12} - 3\frac{8}{12}$

d. $5\frac{1}{100} - 2\frac{97}{100}$

Lesson 33: Subtract a mixed number from a mixed number.

EUREKA
MATH

There were $4\frac{1}{8}$ pizzas. Benny took $\frac{2}{8}$ of a pizza. How many pizzas are left?

Read   **Draw**   **Write**

Name _____   Date _____

1. Subtract.

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

    ```
          /\
       3     4
            ---
             3
    ```

    b. $5\frac{2}{4} - \frac{3}{4}$

    c. $8\frac{3}{5} - \frac{4}{5}$

2. Subtract the ones first.

    a. $3\frac{1}{4} - 1\frac{3}{4} = 2\frac{1}{4} - \frac{3}{4} = 1\frac{2}{4}$

    ```
              /\
          1      5
                ---
                 4
    ```

    b. $4\frac{2}{5} - 1\frac{3}{5}$

c. $5\frac{2}{6} - 3\frac{5}{6}$

d. $9\frac{3}{5} - 2\frac{4}{5}$

3. Solve using any strategy.

a. $7\frac{3}{8} - 2\frac{5}{8}$

b. $6\frac{4}{10} - 3\frac{8}{10}$

c. $8\frac{3}{12} - 3\frac{8}{12}$

d. $14\frac{2}{50} - 6\frac{43}{50}$

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Mary Beth is knitting scarves that are 1 meter long. If she knits 54 centimeters of a scarf each night for 3 nights, how many scarves will she complete? How much more does she need to knit to complete another scarf?

_____

_____

_____

_____

Read   Draw   Write

Lesson 35:   Represent the multiplication of *n* times *a/b* as (*n* × *a*)/*b* using the
associative property and visual models.

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Name _____ Date _____

1. Draw and label a tape diagram to show the following are true.

   a. 8 fifths $= 4 \times (2 \text{ fifths}) = (4 \times 2)$ fifths

   b. 10 sixths $= 5 \times (2 \text{ sixths}) = (5 \times 2)$ sixths

2. Write the expression in unit form to solve.

   a. $7 \times \frac{2}{3}$

   b. $4 \times \frac{2}{4}$

   c. $16 \times \frac{3}{8}$

   d. $6 \times \frac{5}{8}$

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Lesson 35: Represent the multiplication of n times a/b as $(n \times a)/b$ using the associative property and visual models.

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3. Solve.

   a. $7 \times \frac{4}{9}$

   b. $6 \times \frac{3}{5}$

   c. $8 \times \frac{3}{4}$

   d. $16 \times \frac{3}{8}$

   e. $12 \times \frac{7}{10}$

   f. $3 \times \frac{54}{100}$

4. Maria needs $\frac{3}{5}$ yard of fabric for each costume. How many yards of fabric does she need for 6 costumes?

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Rhonda exercised for $\frac{5}{6}$ hour every day for 5 days. How many total hours did Rhonda exercise?

_____

_____

_____

_____

Read   **Draw**   **Write**

EUREKA MATH

Lesson 36:   Represent the multiplication of *n* times *a/b* as (*n* × *a*)/*b* using the
               associative property and visual models.

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Name _____   Date _____

1. Draw a tape diagram to represent

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

    Write a multiplication expression equal to

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

2. Draw a tape diagram to represent

    $\frac{7}{12} + \frac{7}{12} + \frac{7}{12}$.

    Write a multiplication expression equal to

    $\frac{7}{12} + \frac{7}{12} + \frac{7}{12}$.

3. Rewrite each repeated addition problem as a multiplication problem and solve. Express the result as a mixed number. The first one has been started for you.

    a. $\frac{7}{5} + \frac{7}{5} + \frac{7}{5} + \frac{7}{5} = 4 \times \frac{7}{5} = \frac{4 \times 7}{5} =$

    b. $\frac{9}{10} + \frac{9}{10} + \frac{9}{10}$

    c. $\frac{11}{12} + \frac{11}{12} + \frac{11}{12} + \frac{11}{12} + \frac{11}{12}$

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Lesson 36: Represent the multiplication of *n* times *a/b* as (*n* × *a*)/*b* using the associative property and visual models.

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4. Solve using any method. Express your answers as whole or mixed numbers.

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

   b. $12 \times \frac{3}{4}$

   c. $50 \times \frac{4}{5}$

   d. $26 \times \frac{7}{8}$

5. Morgan poured $\frac{9}{10}$ liter of punch into each of 6 bottles. How many liters of punch did she pour in all?

6. A recipe calls for $\frac{3}{4}$ cup rice. How many cups of rice are needed to make the recipe 14 times?

7. A butcher prepared 120 sausages using $\frac{3}{8}$ pound of meat for each. How many pounds did he use in all?

Lesson 36:   Represent the multiplication of *n* times *a/b* as (*n × a*)/*b* using the
                                associative property and visual models.

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The baker needs $\frac{5}{8}$ cup of raisins to make 1 batch of cookies. How many cups of raisins does he need to make 7 batches of cookies?

Read   **Draw**   **Write**

Lesson 37:   Find the product of a whole number and a mixed number using the distributive property.

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Name _____ Date _____

1. Draw tape diagrams to show two ways to represent 2 units of $4\frac{2}{3}$.

Write a multiplication expression to match each tape diagram.

2. Solve the following using the distributive property. The first one has been done for you. (As soon as you are ready, you may omit the step that is in line 2.)

a. $3 \times 6\frac{4}{5} = 3 \times \left(6 + \frac{4}{5}\right)$	b. $2 \times 4\frac{2}{3}$
$\quad\quad = (3 \times 6) + \left(3 \times \frac{4}{5}\right)$ $\quad\quad = 18 + \frac{12}{5}$ $\quad\quad = 18 + 2\frac{2}{5}$ $\quad\quad = 20\frac{2}{5}$	
c. $3 \times 2\frac{5}{8}$	d. $2 \times 4\frac{7}{10}$

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Lesson 37: Find the product of a whole number and a mixed number using the distributive property.

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e. $3 \times 7\frac{3}{4}$	f. $6 \times 3\frac{1}{2}$
g. $4 \times 9\frac{1}{5}$	h. $5\frac{6}{8} \times 4$

3. For one dance costume, Saisha needs $4\frac{2}{3}$ feet of ribbon. How much ribbon does she need for 5 identical costumes?

Lesson 37:   Find the product of a whole number and a mixed number using the
distributive property.

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Eight students are on a relay team. Each runs $1\frac{3}{4}$ kilometers. How many total kilometers does their team run?

_____

_____

_____

_____

Read   **Draw**   **Write**

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Lesson 38:   Find the product of a whole number and a mixed number using the distributive property.

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Name _____   Date _____

1. Fill in the unknown factors.

   a. $7 \times 3\frac{4}{5} = (\underline{\quad} \times 3) + (\underline{\quad} \times \frac{4}{5})$

   b. $3 \times 12\frac{7}{8} = (3 \times \underline{\quad}) + (3 \times \underline{\quad})$

2. Multiply. Use the distributive property.

   a. $7 \times 8\frac{2}{5}$

   b. $4\frac{5}{6} \times 9$

   c. $3 \times 8\frac{11}{12}$

   d. $5 \times 20\frac{8}{10}$

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Lesson 38:   Find the product of a whole number and a mixed number using the distributive property.

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e. $25\dfrac{4}{100} \times 4$

3. The distance around the park is $2\dfrac{5}{10}$ miles. Cecilia ran around the park 3 times. How far did she run?

4. Windsor the dog ate $4\dfrac{3}{4}$ snack bones each day for a week. How many bones did Windsor eat that week?

    Lesson 38:   Find the product of a whole number and a mixed number using the distributive property.

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EUREKA MATH

Name _____   Date _____

Use the RDW process to solve.

1. Tameka ran $2\frac{5}{8}$ miles. Her sister ran twice as far. How far did Tameka's sister run?

2. Natasha's sculpture was $5\frac{3}{16}$ inches tall. Maya's was 4 times as tall. How much shorter was Natasha's sculpture than Maya's?

3. A seamstress needs $1\frac{5}{8}$ yards of fabric to make a child's dress. She needs 3 times as much fabric to make a woman's dress. How many yards of fabric does she need for both dresses?

4. A piece of blue yarn is $5\frac{2}{3}$ yards long. A piece of pink yarn is 5 times as long as the blue yarn. Bailey tied them together with a knot that used $\frac{1}{3}$ yard from each piece of yarn. What is the total length of the yarn tied together?

5. A truck driver drove $35\frac{2}{10}$ miles before he stopped for breakfast. He then drove 5 times as far before he stopped for lunch. How far did he drive that day before his lunch break?

6. Mr. Washington's motorcycle needs $5\frac{5}{10}$ gallons of gas to fill the tank. His van needs 5 times as much gas to fill it. If Mr. Washington pays \$3 per gallon for gas, how much will it cost him to fill both the motorcycle and the van?

Lesson 39: Solve multiplicative comparison word problems involving **fractions.**

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MATH®

Name _____   Date _____

1. The chart to the right shows the height of some football players.

    a. Use the data to create a line plot at the bottom of this page and to answer the questions below.

    b. What is the difference in height of the tallest and shortest players?

    c. Player I and Player B have a combined height that is $1\frac{1}{8}$ feet taller than a school bus. What is the height of a school bus?

Player	Height (in feet)
A	$6\frac{1}{4}$
B	$5\frac{7}{8}$
C	$6\frac{1}{2}$
D	$6\frac{1}{4}$
E	$6\frac{2}{8}$
F	$5\frac{7}{8}$
G	$6\frac{1}{8}$
H	$6\frac{5}{8}$
I	$5\frac{6}{8}$
J	$6\frac{1}{8}$

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Lesson 40: Solve word problems involving the multiplication of a whole number and a fraction including those involving line plots.

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2. One of the players on the team is now 4 times as tall as he was at birth, when he measured $1\frac{5}{8}$ feet. Who is the player?

3. Six of the players on the team weigh over 300 pounds. Doctors recommend that players of this weight drink at least $3\frac{3}{4}$ quarts of water each day. At least how much water should be consumed per day by all 6 players?

4. Nine of the players on the team weigh about 200 pounds. Doctors recommend that people of this weight each eat about $3\frac{7}{10}$ grams of carbohydrates per pound each day. About how many combined grams of carbohydrates should these 9 players eat per pound each day?

EUREKA
MATH

Jackie's paper chain was 5 times as long as Sammy's, which measured $2\frac{75}{100}$ meters. What was the total length of both their chains?

_____

_____

_____

_____

Read   **Draw**   **Write**

EUREKA MATH®

Lesson 41:   Find and use a pattern to calculate the sum of all fractional parts
               between 0 and 1. Share and critique peer strategies.

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Name _____   Date _____

1. Find the sums.

   a. $\frac{0}{3} + \frac{1}{3} + \frac{2}{3} + \frac{3}{3}$

   b. $\frac{0}{4} + \frac{1}{4} + \frac{2}{4} + \frac{3}{4} + \frac{4}{4}$

   c. $\frac{0}{5} + \frac{1}{5} + \frac{2}{5} + \frac{3}{5} + \frac{4}{5} + \frac{5}{5}$

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

   e. $\frac{0}{7} + \frac{1}{7} + \frac{2}{7} + \frac{3}{7} + \frac{4}{7} + \frac{5}{7} + \frac{6}{7} + \frac{7}{7}$

   f. $\frac{0}{8} + \frac{1}{8} + \frac{2}{8} + \frac{3}{8} + \frac{4}{8} + \frac{5}{8} + \frac{6}{8} + \frac{7}{8} + \frac{8}{8}$

2. Describe a pattern you notice when adding the sums of fractions with even denominators as opposed to those with odd denominators.

3. How would the sums change if the addition started with the unit fraction rather than with 0?

EUREKA MATH®   **Lesson 41:**   Find and use a pattern to calculate the sum of all fractional parts between 0 and 1. Share and critique peer strategies.   **263**

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4. Find the sums.

a. $\frac{0}{10} + \frac{1}{10} + \frac{2}{10} + \cdots + \frac{10}{10}$

b. $\frac{0}{12} + \frac{1}{12} + \frac{2}{12} + \cdots + \frac{12}{12}$

c. $\frac{0}{15} + \frac{1}{15} + \frac{2}{15} + \cdots + \frac{15}{15}$

d. $\frac{0}{25} + \frac{1}{25} + \frac{2}{25} + \cdots + \frac{25}{25}$

e. $\frac{0}{50} + \frac{1}{50} + \frac{2}{50} + \cdots + \frac{50}{50}$

f. $\frac{0}{100} + \frac{1}{100} + \frac{2}{100} + \cdots + \frac{100}{100}$

5. Compare your strategy for finding the sums in Problems 4(d), 4(e), and 4(f) with a partner.

6. How can you apply this strategy to find the sum of all the whole numbers from 0 to 100?

Lesson 41: Find and use a pattern to calculate the sum of all fractional parts between 0 and 1. Share and critique peer strategies.

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Learn

Eureka Math®
Grade 4
Modules 6 & 7

Grade 4
Module 6

Name _____   Date _____

1. Shade the first 7 units of the tape diagram. Count by tenths to label the number line using a fraction and a decimal for each point. Circle the decimal that represents the shaded part.

0   0.1   ___   ___   ___   ___   ___   ___   ___   ___   1

       $\frac{1}{10}$
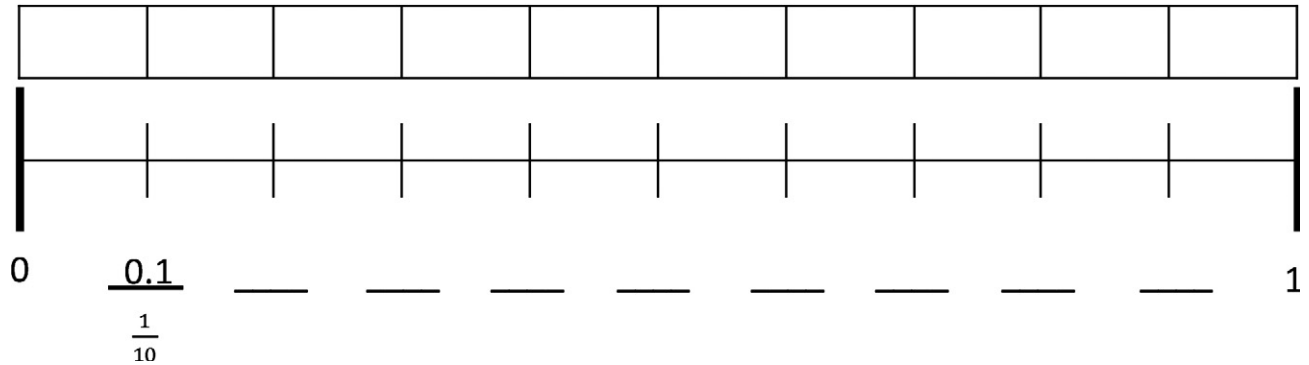
2. Write the total amount of water in fraction form and decimal form. Shade the last bottle to show the correct amount.

$\frac{\square}{\square}$ L = [   ] L

$\frac{\square}{\square}$ L = [   ] L

$\frac{\square}{\square}$ L = 0.9 L
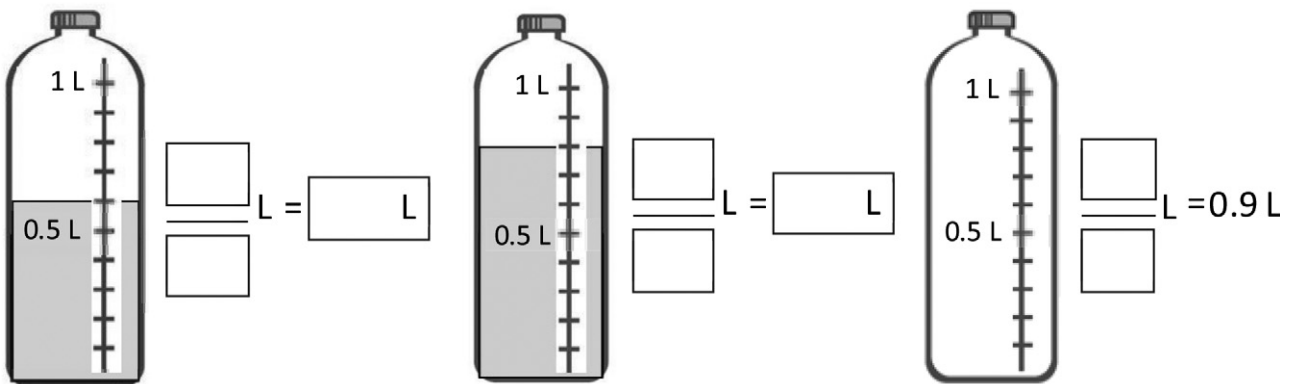
3. Write the total weight of the food on each scale in fraction form or decimal form.

0.4 kg

___ kg

0.5 kg

[kg   ]
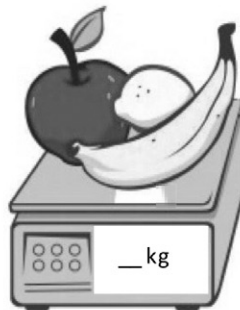
[$\frac{8}{10}$ kg]

[kg   ]

4. Write the length of the bug in centimeters. (The drawing is not to scale.)

Fraction form: _____ cm

Decimal form: _____ cm

How far does the bug need to walk before its nose is at the 1 cm mark? _____ cm

5. Fill in the blank to make the sentence true in both fraction form and decimal form.

a. $\frac{8}{10}$ cm + _____ cm = 1 cm   0.8 cm + _____ cm = 1.0 cm

b. $\frac{2}{10}$ cm + _____ cm = 1 cm   0.2 cm + _____ cm = 1.0 cm

c. $\frac{6}{10}$ cm + _____ cm = 1 cm   0.6 cm + _____ cm = 1.0 cm

6. Match each amount expressed in unit form to its equivalent fraction and decimal forms.

3 tenths		$\frac{5}{10}$		0.2
5 tenths		$\frac{9}{10}$		0.6
6 tenths		$\frac{2}{10}$		0.3
9 tenths		$\frac{3}{10}$		0.5
2 tenths		$\frac{6}{10}$		0.9

Lesson 1:   Use metric measurement to model the decomposition of one whole into tenths.

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Yesterday, Ben's bamboo plant grew 0.5 centimeter. Today it grew another $\frac{8}{10}$ centimeter.

How many centimeters did Ben's bamboo plant grow in 2 days?

_____

_____

_____

_____

Read   **Draw**   **Write**

EUREKA MATH®

Lesson 2:   Use metric measurement and area models to represent tenths as
                    fractions greater than 1 and decimal numbers.

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Name _____   Date _____

1. For each length given below, draw a line segment to match. Express each measurement as an equivalent mixed number.

   a. 2.6 cm

   b. 3.4 cm

   c. 3.7 cm

   d. 4.2 cm

   e. 2.5 cm

2. Write the following as equivalent decimals. Then, model and rename the number as shown below.

   a. 2 ones and 6 tenths = _____

   $2\frac{6}{10}$ = 2 + $\frac{6}{10}$ = 2 + 0.6 = 2.6

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Lesson 2:   Use metric measurement and area models to represent tenths as fractions greater than 1 and decimal numbers.

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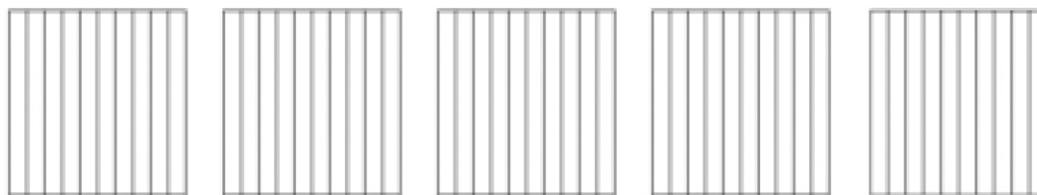
b.   4 ones and 2 tenths = _____
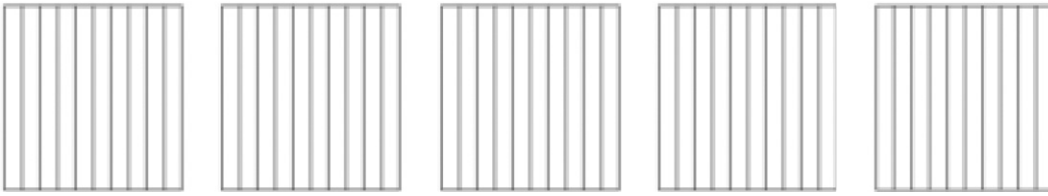
c. $3\frac{4}{10}$ = _____
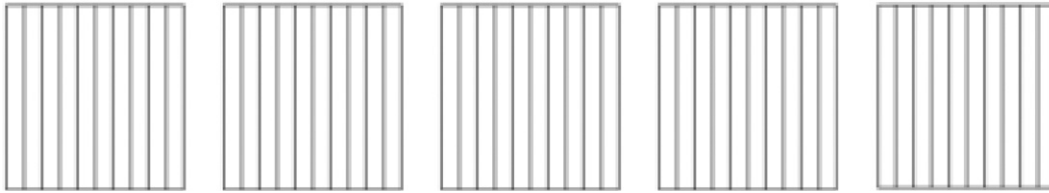
d. $2\frac{5}{10}$ = _____
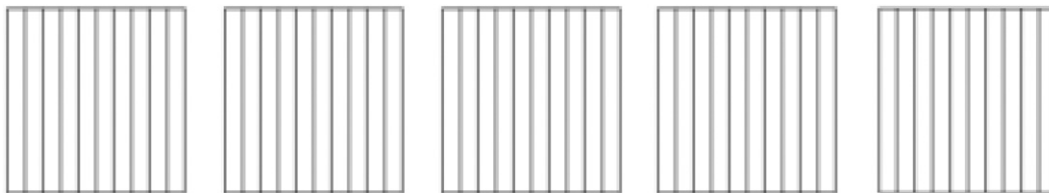
How much more is needed to get to 5? _____

e. $\frac{37}{10}$ = _____

How much more is needed to get to 5? _____

Lesson 2:   Use metric measurement and area models to represent tenths as
                                     fractions greater than 1 and decimal numbers.

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EUREKA MATH®

tenths area model

Lesson 2: Use metric measurement and area models to represent tenths as fractions greater than 1 and decimal numbers.

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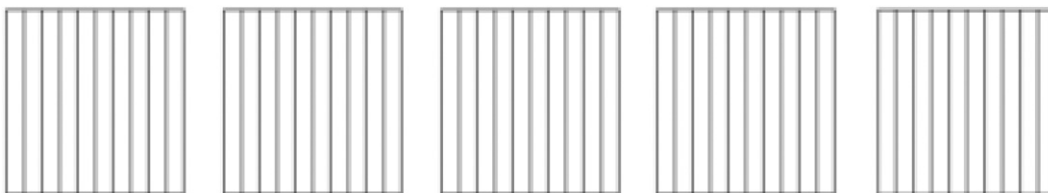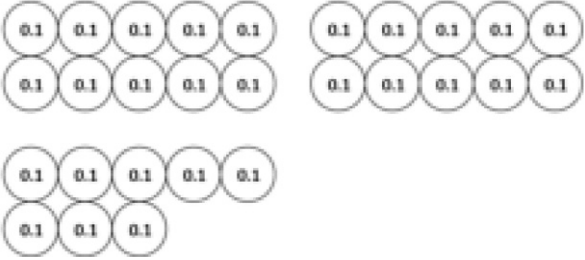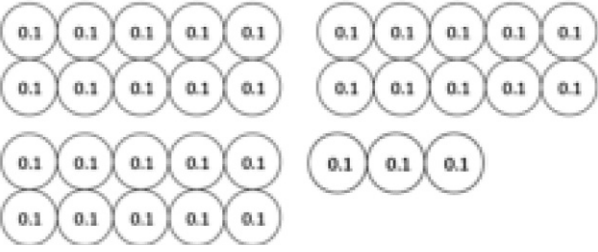
Ed bought 4 pieces of salmon weighing a total of 2 kilograms. One piece weighed $\frac{4}{10}$ kg, and two of the pieces weighed $\frac{5}{10}$ kg each. What was the weight of the fourth piece of salmon?

_____

_____

_____

_____

Read   **Draw**   **Write**

EUREKA MATH

Lesson 3:   Represent mixed numbers with units of tens, ones, and tenths with place value disks, on the number line, and in expanded form.

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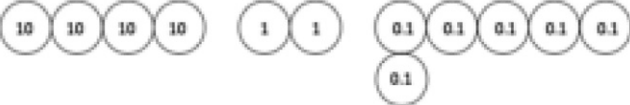
Name _____   Date _____

1. Circle groups of tenths to make as many ones as possible.
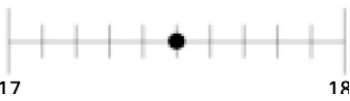
a. How many tenths in all?	Write and draw the same number using ones and tenths.
0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 There are _____ tenths.	 Decimal Form: _____ How much more is needed to get to 3? _____
b. How many tenths in all?	Write and draw the same number using ones and tenths.
0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 There are _____ tenths.	 Decimal Form: _____ How much more is needed to get to 4? _____

2. Draw disks to represent each number using tens, ones, and tenths. Then, show the expanded form of the number in fraction form and decimal form as shown. The first one has been completed for you.

a. 4 tens 2 ones 6 tenths	b. 1 ten 7 ones 5 tenths
10 10 10 10 1 1 0.1 0.1 0.1 0.1 0.1 0.1 Fraction Expanded Form $(4 \times 10) + (2 \times 1) + (6 \times \frac{1}{10}) = 42\frac{6}{10}$ Decimal Expanded Form $(4 \times 10) + (2 \times 1) + (6 \times 0.1) = 42.6$	

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c. 2 tens 3 ones 2 tenths	d. 7 tens 4 ones 7 tenths

3.   Complete the chart.

Point	Number Line	Decimal Form	Mixed Number (ones and fraction form)	Expanded Form (fraction or decimal form)	How much to get to the next one?
a.			$3\frac{9}{10}$		0.1
b.	17 18				
c.				$(7 \times 10) + (4 \times 1) + (7 \times \frac{1}{10})$	
d.			$22\frac{2}{10}$		
e.				$(8 \times 10) + (8 \times 0.1)$	
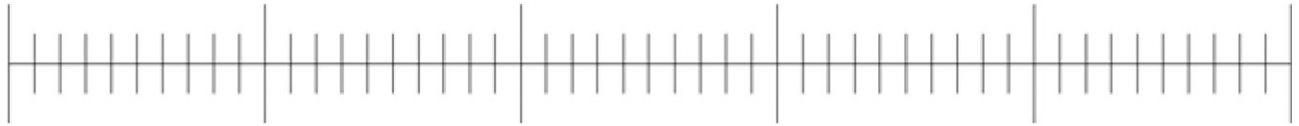
Lesson 3:   Represent mixed numbers with units of tens, ones, and tenths with
                          place value disks, on the number line, and in expanded form.   EUREKA
                                                                                                           MATH

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Point	Number Line	Decimal Form	Mixed Number (ones and fraction form)	Expanded Form (fraction or decimal form)	How much more is needed to get to the next one?
a.					
b.					
c.					
d.					

tenths on a number line

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Lesson 3: Represent mixed numbers with units of tens, ones, and tenths with place value disks, on the number line, and in expanded form.

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Ali is knitting a scarf that will be 2 meters long. So far, she has knitted $1\frac{2}{10}$ meters.

   a. How many more meters does Ali need to knit to complete the scarf? Write the answer as a fraction and as a decimal.

   b. How many more centimeters does Ali need to knit to complete the scarf?

Read   **Draw**   **Write**

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Lesson 4:   Use meters to model the decomposition of one whole into hundredths. Represent and count hundredths.

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Name _____   Date _____

1. a. What is the length of the shaded part of the meter stick in centimeters?
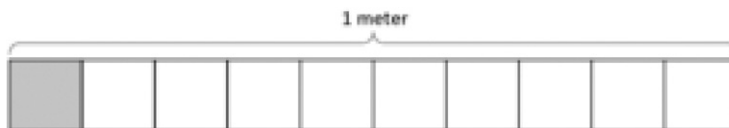
   1 meter

   b. What fraction of a meter is 1 centimeter?

   c. In fraction form, express the length of the shaded portion of the meter stick.
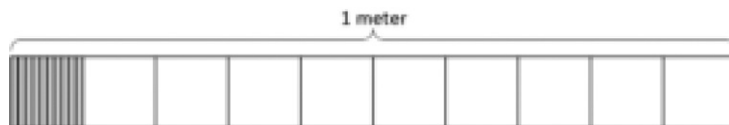
   1 meter

   d. In decimal form, express the length of the shaded portion of the meter stick.

   e. What fraction of a meter is 10 centimeters?

2. Fill in the blanks.

   a. 1 tenth = _____ hundredths

   b. $\frac{1}{10}$ m = $\frac{}{100}$ m

   c. $\frac{2}{10}$ m = $\frac{20}{}$ m

3. Use the model to add the shaded parts as shown. Write a number bond with the total written in decimal form and the parts written as fractions. The first one has been done for you.

   a.

   1 meter

   0.13

   $\frac{1}{10}$ $\frac{3}{100}$

   $$\frac{1}{10}m + \frac{3}{100}m = \frac{13}{100}m = 0.13\text{ m}$$

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Lesson 4:   Use meters to model the decomposition of one whole into hundredths.
             Represent and count hundredths.

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b.

1 meter

c.
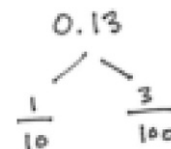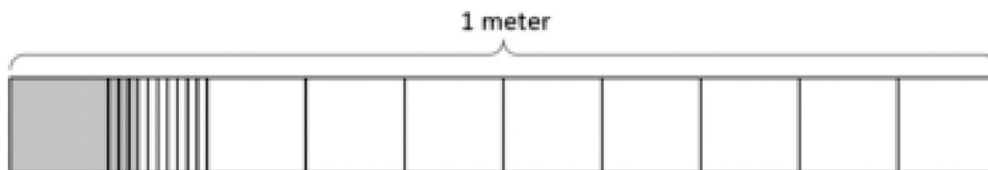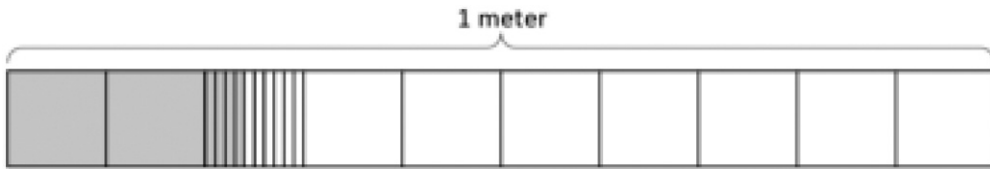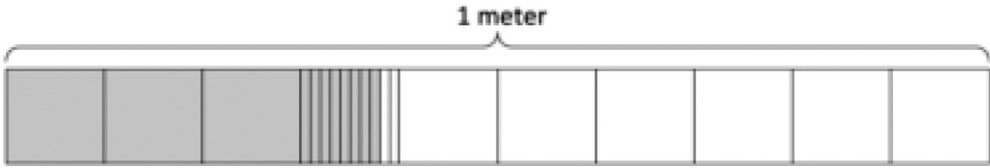
1 meter

4. On each meter stick, shade in the amount shown. Then, write the equivalent decimal.

1 meter

a. $\frac{8}{10}$ m
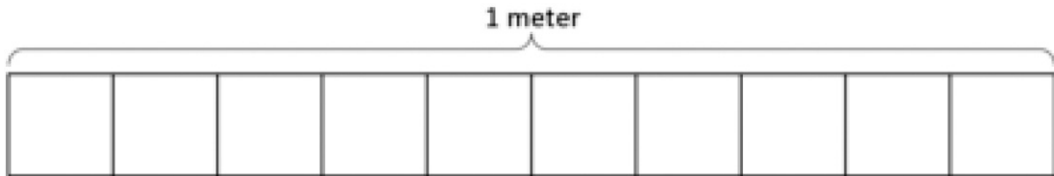
1 meter
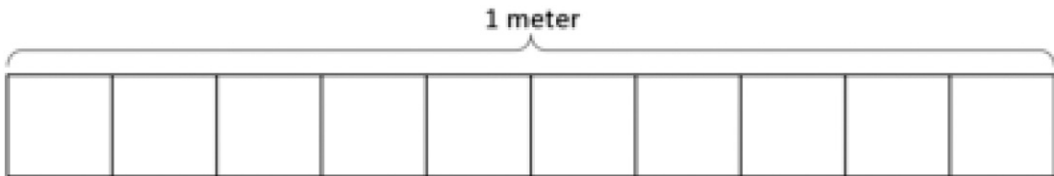
b. $\frac{7}{100}$ m
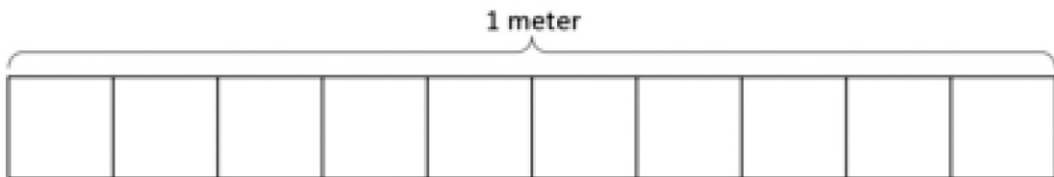
1 meter

c. $\frac{19}{100}$ m

5. Draw a number bond, pulling out the tenths from the hundredths as in Problem 3. Write the total as the equivalent decimal.

a. $\frac{19}{100}$ m

b. $\frac{28}{100}$ m

c. $\frac{77}{100}$

d. $\frac{94}{100}$

Lesson 4:   Use meters to model the decomposition of one whole into hundredths. Represent and count hundredths.

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1 meter

1 meter

1 meter

1 meter

1 meter

tape diagram in tenths

Lesson 4:   Use meters to model the decomposition of one whole into hundredths.
Represent and count hundredths.

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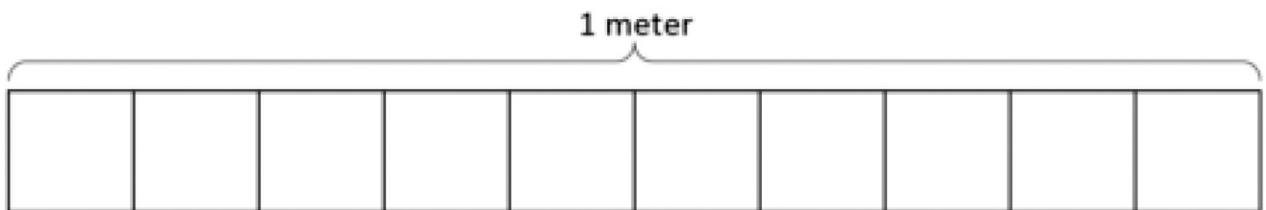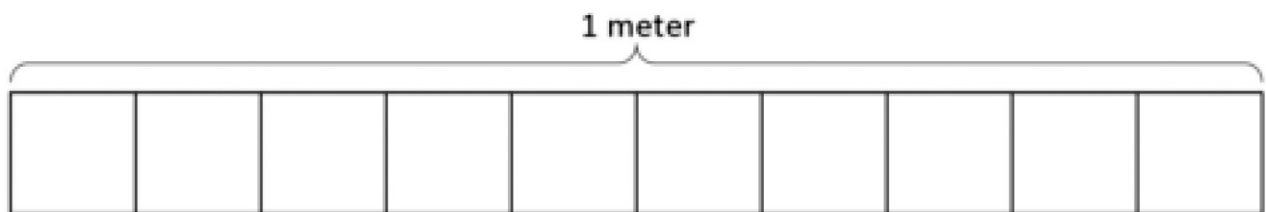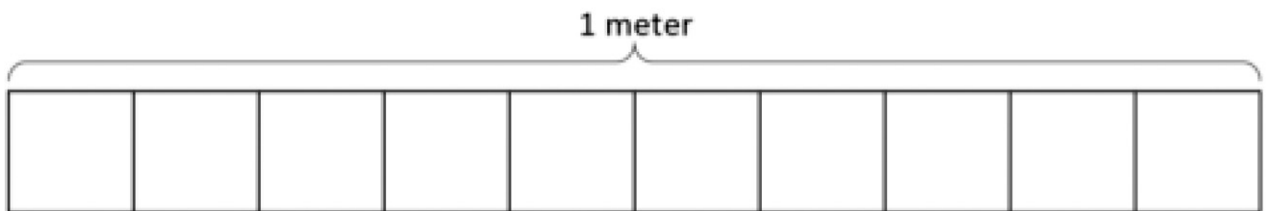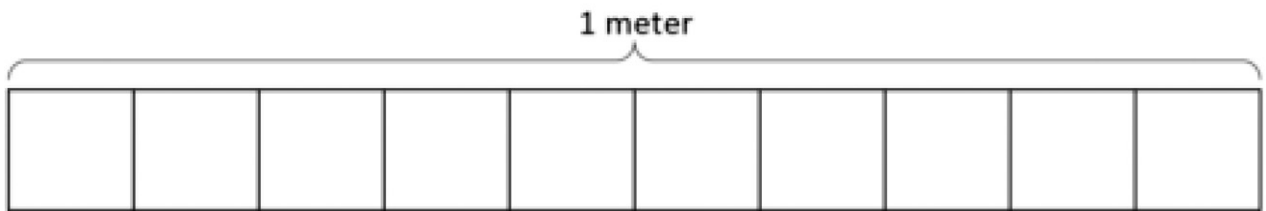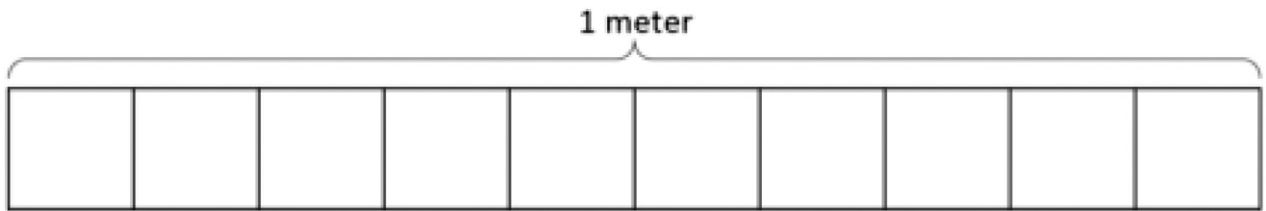
The perimeter of a square measures 0.48 m. What is the measure of each side length in centimeters?

_____

_____

_____

_____

Read   **Draw**   **Write**

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Lesson 5: Model the equivalence of tenths and hundredths using the area
model and place value disks.

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Name _____ Date _____

1. Find the equivalent fraction using multiplication or division. Shade the area models to show the equivalency. Record it as a decimal.

a. $\dfrac{3\times}{10\times} = \dfrac{}{100}$

b. $\dfrac{50\div}{100\div} = \dfrac{}{10}$
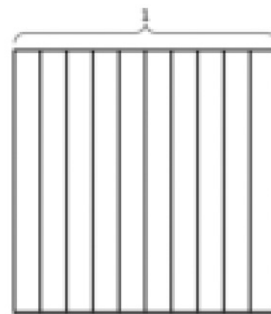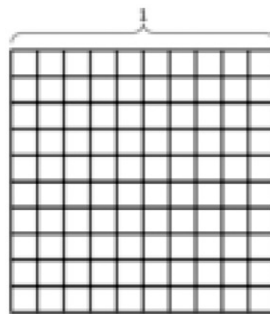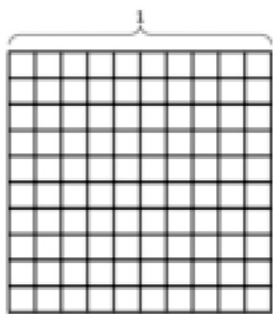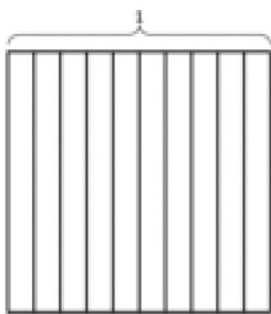
2. Complete the number sentences. Shade the equivalent amount on the area model, drawing horizontal lines to make hundredths.

a. 37 hundredths = _____ tenths + _____ hundredths

Fraction form: _____
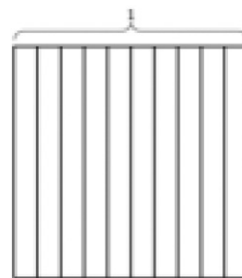
Decimal form: _____

b. 75 hundredths = _____ tenths + _____ hundredths

Fraction form: _____

Decimal form: _____
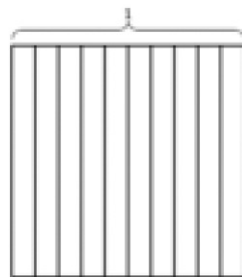
3. Circle hundredths to compose as many tenths as you can. Complete the number sentences. Represent each with a number bond as shown.

a.
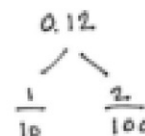
_____ hundredths = _____ tenth + _____ hundredths

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Lesson 5: Model the equivalence of tenths and hundredths using the area model and place value disks.

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b.

hundredths = _____ tenths + _____ hundredths
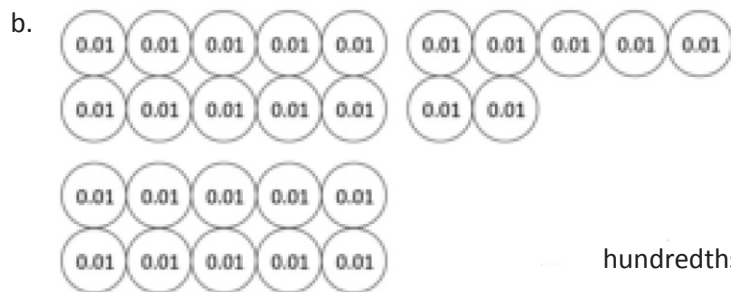
4. Use both tenths and hundredths place value disks to represent each number. Write the equivalent number in decimal, fraction, and unit form.

a. $\frac{3}{100}$ = 0._____ _____ hundredths	b. $\frac{15}{100}$ = 0._____ _____ tenth _____ hundredths
c. ___ = 0.72 _____ hundredths	d. ___ = 0.80 _____ tenths
e. ___ = 0._____ 7 tenths 2 hundredths	f. ___ = 0._____ 80 hundredths

Lesson 5: Model the equivalence of tenths and hundredths using the area model and place value disks.

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· tenths and hundredths area model

Lesson 5:   Model the equivalence of tenths and hundredths using the area model and place value disks.

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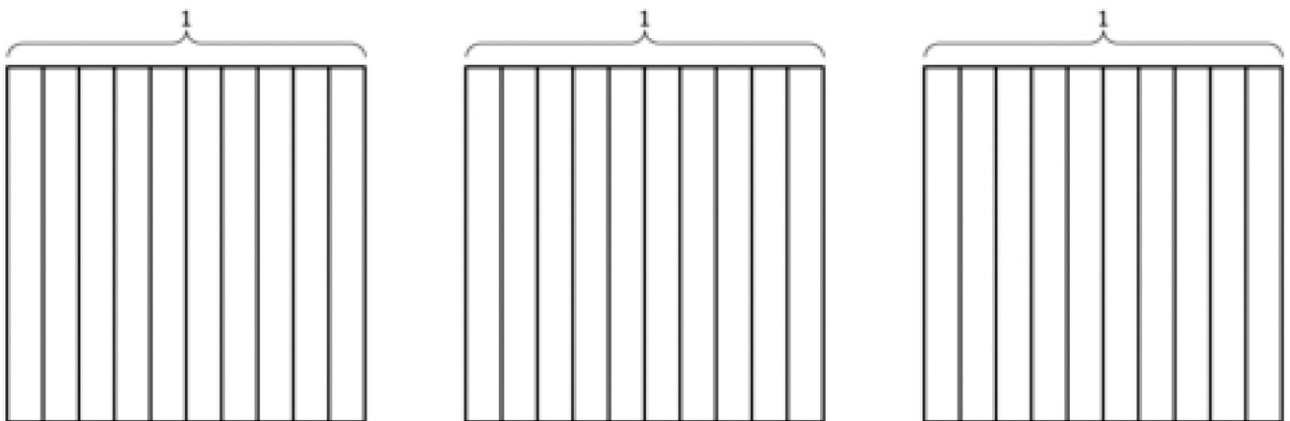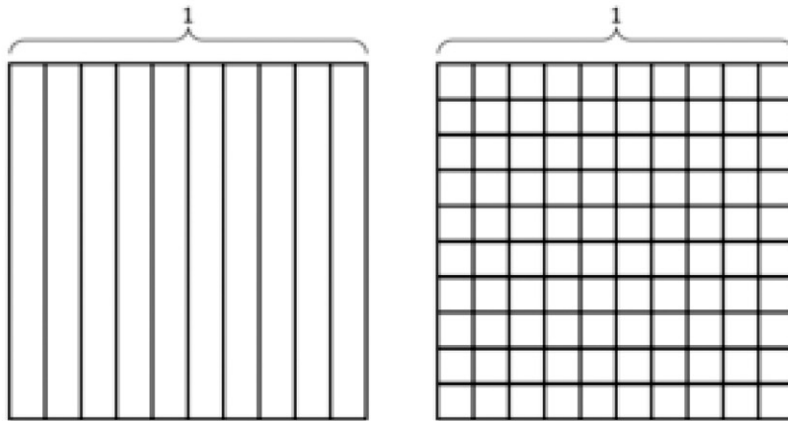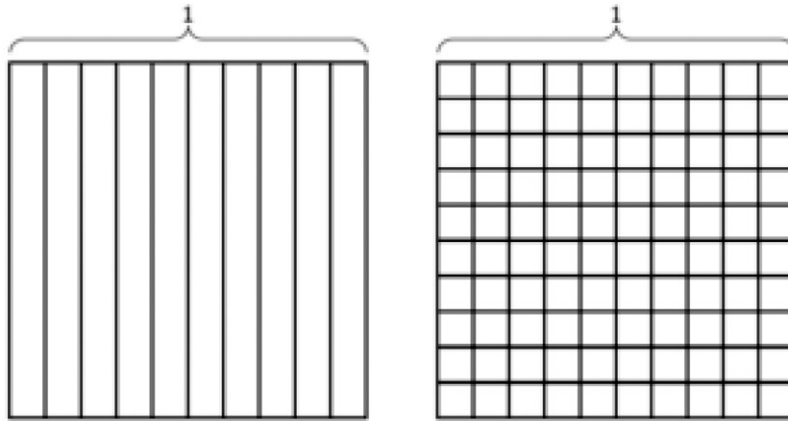
The table shows the perimeter of four rectangles.

a. Which rectangle has the smallest perimeter?

Rectangle	Perimeter
A	54 cm
B	$\frac{69}{100}$ m
C	54 m
D	0.8 m

b. The perimeter of Rectangle C is how many meters less than a kilometer?

Read   **Draw**   **Write**

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Lesson 6:   Use the area model and number line to represent mixed numbers with
units of ones, tenths, and hundredths in fraction and decimal forms.

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c. Compare the perimeters of Rectangles B and D. Which rectangle has the greater perimeter?

How much greater?

Read   **Draw**   **Write**

Lesson 6:   Use the area model and number line to represent mixed numbers with
                    units of ones, tenths, and hundredths in fraction and decimal forms.

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Name _____   Date _____

1. Shade the area models to represent the number, drawing horizontal lines to make hundredths as needed. Locate the corresponding point on the number line. Label with a point, and record the mixed number as a decimal.

    a. $1\frac{15}{100}$ = ____ . _____
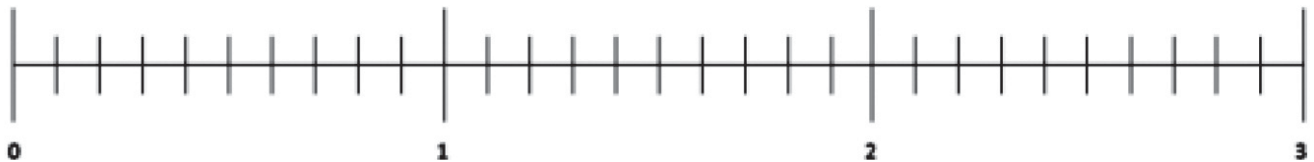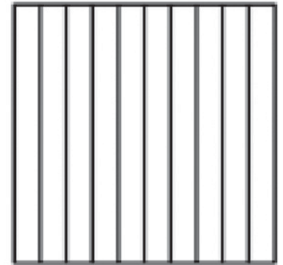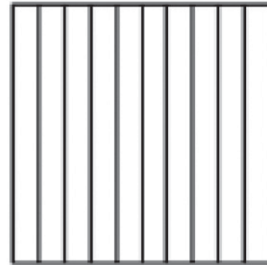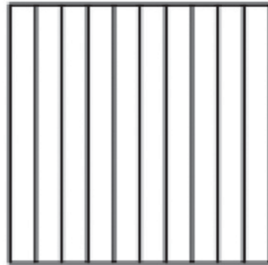
    b. $2\frac{47}{100}$ = ____ . _____
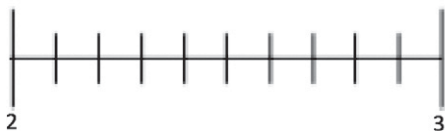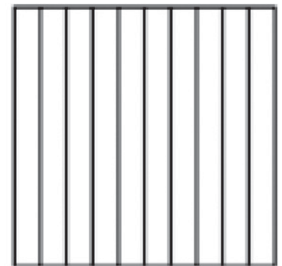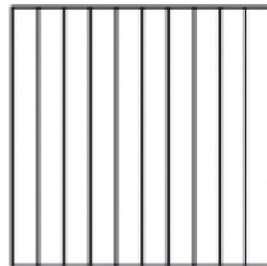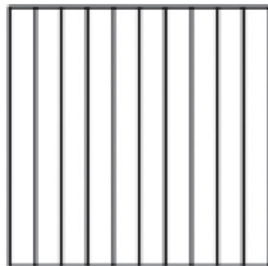
2. Estimate to locate the points on the number lines.

    a. $2\frac{95}{100}$ b. $7\frac{52}{100}$

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Lesson 6:   Use the area model and number line to represent mixed numbers with units of ones, tenths, and hundredths in fraction and decimal forms.

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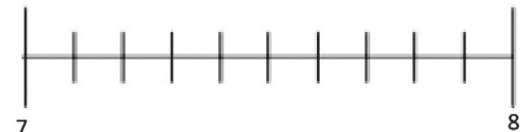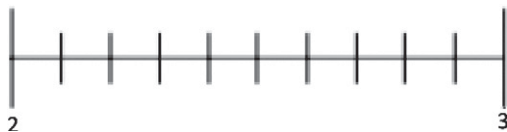
3. Write the equivalent fraction and decimal for each of the following numbers.

a. 1 one 2 hundredths	b. 1 one 17 hundredths
c. 2 ones 8 hundredths	d. 2 ones 27 hundredths
e. 4 ones 58 hundredths	f. 7 ones 70 hundredths

4. Draw lines from dot to dot to match the decimal form to both the unit form and fraction form. All unit forms and fractions have at least one match, and some have more than one match.

7 ones 13 hundredths ●

7 ones 3 hundredths ●

7 ones 3 tenths ●

7 tens 3 ones ●

● 7.30 ●

● 7.3 ●

● 7.03 ●

● 7.13 ●

● 73 ●

● $7\frac{3}{100}$

● 73

● $7\frac{13}{100}$

● $7\frac{30}{100}$

Lesson 6: Use the area model and number line to represent mixed numbers with units of ones, tenths, and hundredths in fraction and decimal forms.

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area model

Lesson 6:   Use the area model and number line to represent mixed numbers with
                  units of ones, tenths, and hundredths in fraction and decimal forms.

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number line

Lesson 6:   Use the area model and number line to represent mixed numbers with
units of ones, tenths, and hundredths in fraction and decimal forms.

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Use pattern blocks to create at least 1 figure with at least 1 line of symmetry. Draw your figure below.

_____

_____

_____

_____

Read   **Draw**   **Write**

Lesson 7:   Model mixed numbers with units of hundreds, tens, ones, tenths, and
          hundredths in expanded form and on the place value chart.

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Name _____ Date _____

1. Write a decimal number sentence to identify the total value of the place value disks.

a.

| 10 | 10 | | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | 0.01 | 0.01 | 0.01 |

2 tens   **5 tenths**   **3 hundredths**

_____ + _____ + _____ = _____

b.

| 100 | 100 | 100 | 100 | 100 | | 0.01 | 0.01 | 0.01 | 0.01 |

5 hundreds   **4 hundredths**

_____ + _____ = _____

2. Use the place value chart to answer the following questions. Express the value of the digit in unit form.

hundreds	tens	ones	•	tenths	hundredths
4	1	6		8	3

a. The digit _____ is in the hundreds place. It has a value of _____.

b. The digit _____ is in the tens place. It has a value of _____.

c. The digit _____ is in the tenths place. It has a value of _____.

d. The digit _____ is in the hundredths place. It has a value of _____.

hundreds	tens	ones	•	tenths	hundredths
5	3	2		1	6

e. The digit _____ is in the hundreds place. It has a value of _____.

f. The digit _____ is in the tens place. It has a value of _____.

g. The digit _____ is in the tenths place. It has a value of _____.

h. The digit _____ is in the hundredths place. It has a value of _____.

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Lesson 7:   Model mixed numbers with units of hundreds, tens, ones, tenths, and
hundredths in expanded form and on the place value chart.

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3. Write each decimal as an equivalent fraction. Then, write each number in expanded form, using both decimal and fraction notation. The first one has been done for you.

Decimal and Fraction Form	Expanded Form	
	Fraction Notation	**Decimal Notation**
$15.43 = 15\frac{43}{100}$	$(1 \times 10) + (5 \times 1) + (4 \times \frac{1}{10}) + (3 \times \frac{1}{100})$ $10 \ + \ 5 \ + \ \frac{4}{10} \ + \ \frac{3}{100}$	$(1 \times 10) + (5 \times 1) + (4 \times 0.1) + (3 \times 0.01)$ $10 \ + \ 5 \ + \ 0.4 \ + \ 0.03$
$21.4 = $ _____		
$38.09 = $ _____		
$50.2 = $ _____		
$301.07 = $ _____		
$620.80 = $ _____		
$800.08 = $ _____		

Lesson 7:   Model mixed numbers with units of hundreds, tens, ones, tenths, and
              hundredths in expanded form and on the place value chart.

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hundredths		tenths		.		ones		tens		hundreds	

place value chart

Lesson 7: Model mixed numbers with units of hundreds, tens, ones, tenths, and hundredths in expanded form and on the place value chart.

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Jashawn had 5 hundred dollar bills and 6 ten dollar bills in his wallet. Alva had 58 ten dollar bills under her mattress. James had 556 one dollar bills in his piggy bank. They decide to combine their money to buy a computer. Express the total amount of money they have using the following bills:

    a. Hundreds, tens, and ones

    b. Tens and ones

Read   **Draw**   **Write**

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Lesson 8:   Use understanding of fraction equivalence to investigate decimal numbers on the place value chart expressed in different units.

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c. Ones

Read   **Draw**   **Write**

Lesson 8:   Use understanding of fraction equivalence to investigate decimal
                   numbers on the place value chart expressed in different units.

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Name _____ Date _____

1. Use the area model to represent $\frac{250}{100}$. Complete the number sentence.

   a. $\frac{250}{100}$ = _____ tenths = _____ ones _____ tenths = __.____
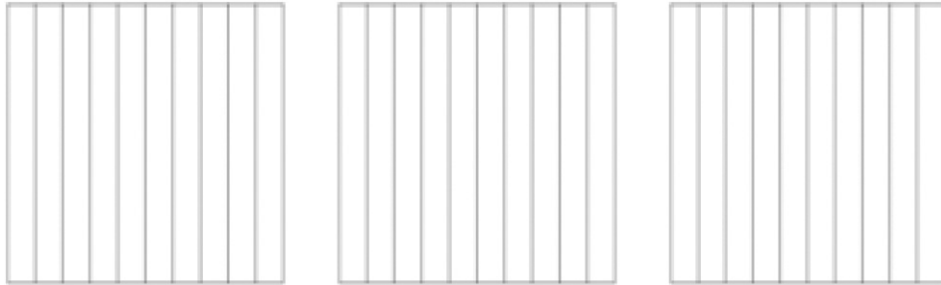
   b. In the space below, explain how you determined your answer to part (a).

2. Draw place value disks to represent the following decompositions:

   2 ones = _____ tenths

ones	•	tenths	hundredths

   2 tenths = _____ hundredths

ones	•	tenths	hundredths

   1 one 3 tenths = _____ tenths

ones	•	tenths	hundredths

   2 tenths 3 hundredths = _____ hundredths

ones	•	tenths	hundredths

Lesson 8: Use understanding of fraction equivalence to investigate decimal numbers on the place value chart expressed in different units.

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3. Decompose the units to represent each number as tenths.

   a. 1 = _____ tenths

   b. 2 = _____ tenths

   b. 1.7 = _____ tenths

   c. 2.9 = _____ tenths

   c. 10.7 = _____ tenths

   d. 20.9 = _____ tenths

4. Decompose the units to represent each number as hundredths.

   a. 1 = _____ hundredths

   b. 2 = _____ hundredths

   b. 1.7 = _____ hundredths

   c. 2.9 = _____ hundredths

   c. 10.7 = _____ hundredths

   d. 20.9 = _____ hundredths

5. Complete the chart. The first one has been done for you.

Decimal	Mixed Number	Tenths	Hundredths
2.1	$2\frac{1}{10}$	21 tenths $\frac{21}{10}$	210 hundredths $\frac{210}{100}$
4.2			
8.4			
10.2			
75.5			

Lesson 8:   Use understanding of fraction equivalence to investigate decimal
numbers on the place value chart expressed in different units.

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Tens	Ones	.	Tenths	Hundredths

_____

area model and place value chart

Lesson 8:   Use understanding of fraction equivalence to investigate decimal   **63**
            numbers on the place value chart expressed in different units.

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Kelly's dog weighs 14 kilograms 24 grams. Mary's dog weighs 14 kilograms 205 grams. Hae Jung's dog weighs 4,720 grams.

    a. Order the weight of the dogs in grams from least to greatest.

    b. How much more does the heaviest dog weigh than the lightest dog?

Read   **Draw**   **Write**

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Lesson 9:   Use the place value chart and metric measurement to compare decimals and answer comparison questions.

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Name _____   Date _____

1. Express the lengths of the shaded parts in decimal form. Write a sentence that compares the two lengths.
   Use the expression *shorter than* or *longer than* in your sentence.

   a.

   1 meter

   1 meter

   b.

   1 meter

   1 meter
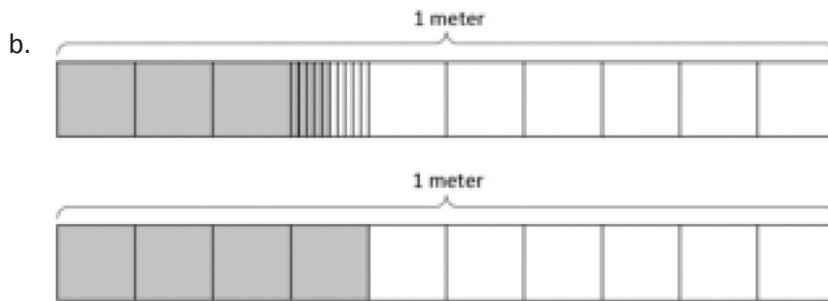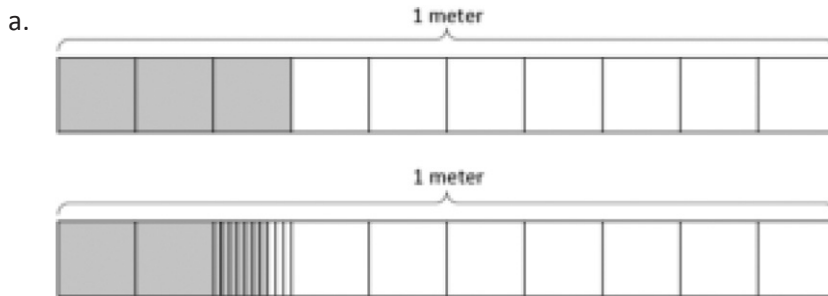
   c. List all four lengths from least to greatest.

2. a. Examine the mass of each item as shown below on the 1-kilogram scales. Put an X over the items
   that are heavier than the avocado.

   0.2 kg   0.12 kg   0.6 kg   0.61 kg

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Lesson 9:   Use the place value chart and metric measurement to compare
             decimals and answer comparison questions.

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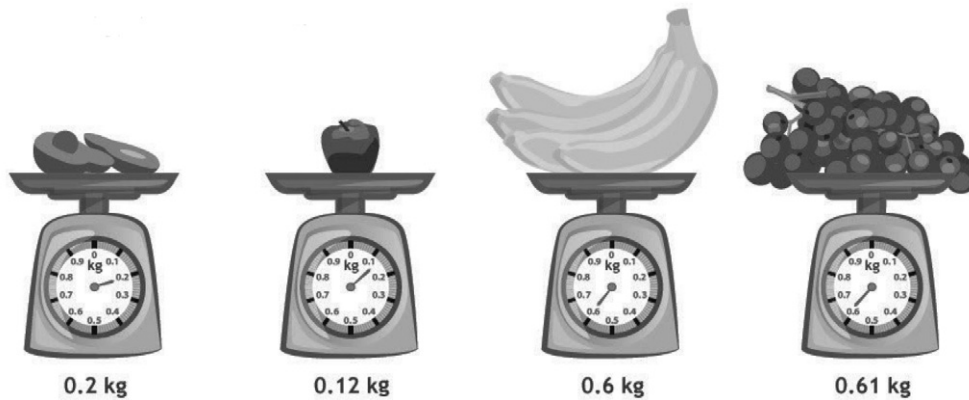
b. Express the mass of each item on the place value chart.

Mass of Fruit (kilograms)

Fruit	ones	·	tenths	hundredths
avocado				
apple				
bananas				
grapes				

c. Complete the statements below using the words *heavier than* or *lighter than* in your statements.

The avocado is _____ the apple.

The bunch of bananas is _____ the bunch of grapes.

3. Record the volume of water in each graduated cylinder on the place value chart below.

A	B	C	D	E	F
1 L	1 L	1 L	1 L	1 L	1 L

| 0.6 liter | 0.3 liter | 0.9 liter | 0.97 liter | 0.19 liter | 0.48 liter |
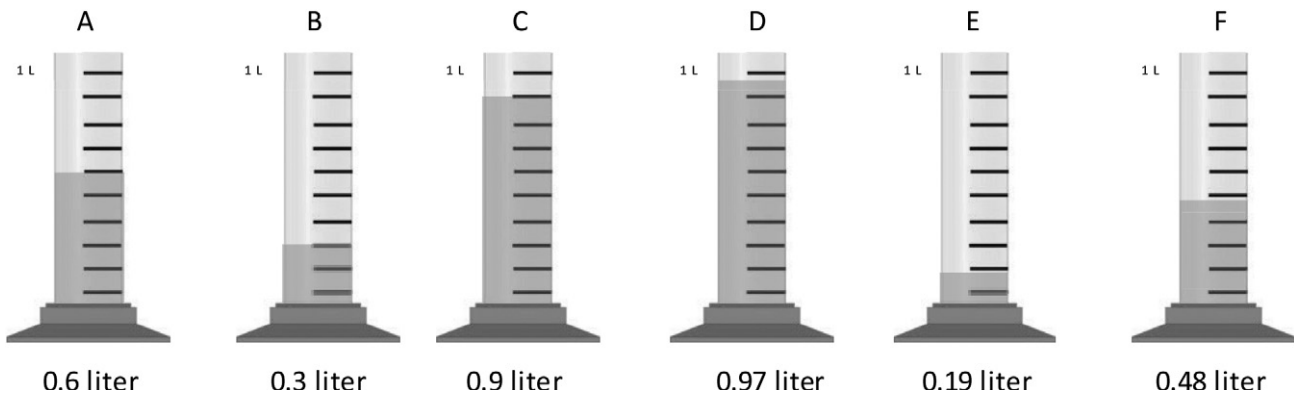
Volume of Water (liters)

Cylinder	ones	·	tenths	hundredths
A				
B				
C				
D				
E				
F				

Compare the values using >, <, or =.

a. 0.9 L _____ 0.6 L

b. 0.48 L _____ 0.6 L

c. 0.3 L _____ 0.19 L

d. Write the volume of water in each graduated cylinder in order from least to greatest.

Lesson 9: Use the place value chart and metric measurement to compare decimals and answer comparison questions.

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Mass of Rice Bags (kilograms)

Rice Bag	ones	·	tenths	hundredths
A				
B				
C				
D				

Volume of Liquid (liters)

Cylinder	ones	·	tenths	hundredths
A				
B				
C				
D				

measurement record

Lesson 9: Use the place value chart and metric measurement to compare decimals and answer comparison questions.

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In science class, Emily's 1-liter beaker contains 0.3 liter of water. Ali's beaker contains 0.8 liter of water, and Katie's beaker contains 0.63 liter of water. Who can pour all of her water into Emily's beaker without going over 1 liter, Ali or Katie?

Read   **Draw**   **Write**

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Lesson 10:   Use area models and the number line to compare decimal numbers, and record comparisons using <, >, and =.

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1. Shade the area models below, decomposing tenths as needed, to represent the pairs of decimal numbers. Fill in the blank with <, >, or = to compare the decimal numbers.

   a. 0.23 _____ 0.4
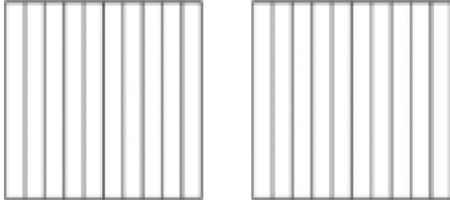
   b. 0.6 _____ 0.38
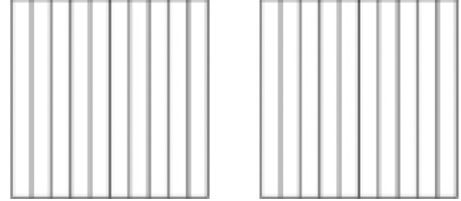
   c. 0.09 _____ 0.9
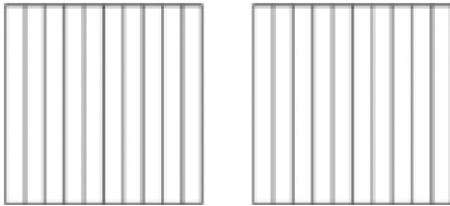
   c. 0.70 _____ 0.7
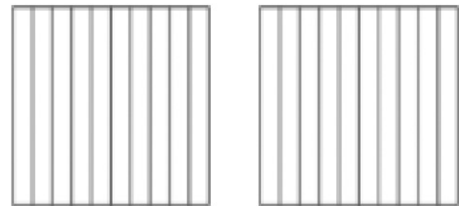
2. Locate and label the points for each of the decimal numbers on the number line. Fill in the blank with <, >, or = to compare the decimal numbers.

   a. 10.03 _____ 10.3

   10.0   10.1   10.2   10.3

   b. 12.68 _____ 12.8

   12.6   12.7   12.8   12.9

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Lesson 10: Use area models and the number line to compare decimal numbers, and record comparisons using <, >, and =.

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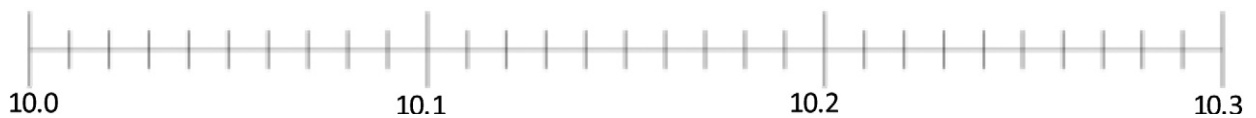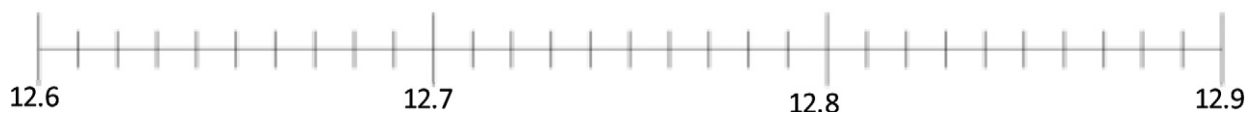
3. Use the symbols <, >, or = to compare.

a. 3.42 _____ 3.75

b. 4.21 _____ 4.12

c. 2.15 _____ 3.15

d. 4.04 _____ 6.02

e. 12.7 _____ 12.70

f. 1.9 _____ 1.21

4. Use the symbols <, >, or = to compare. Use pictures as needed to solve.

a. 23 tenths _____ 2.3

b. 1.04 _____ 1 one and 4 tenths

c. 6.07 _____ $6\frac{7}{10}$

d. 0.45 _____ $\frac{45}{10}$

e. $\frac{127}{100}$ _____ 1.72

f. 6 tenths _____ 66 hundredths

Lesson 10: Use area models and the number line to compare decimal numbers, and record comparisons using <, >, and =.

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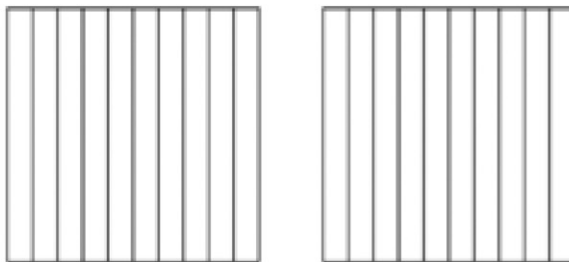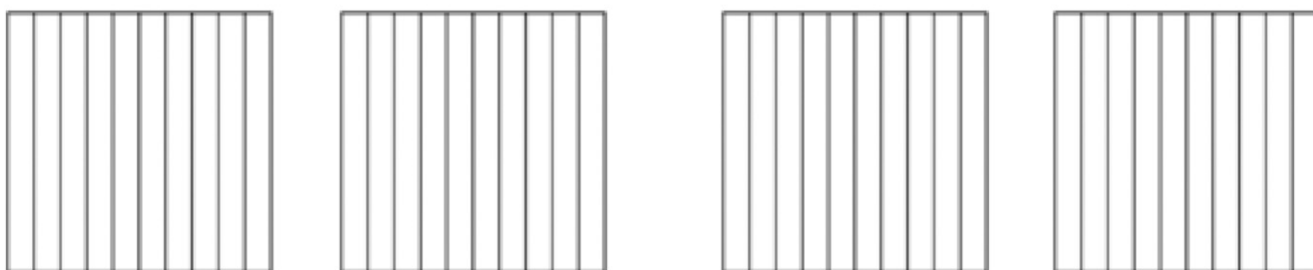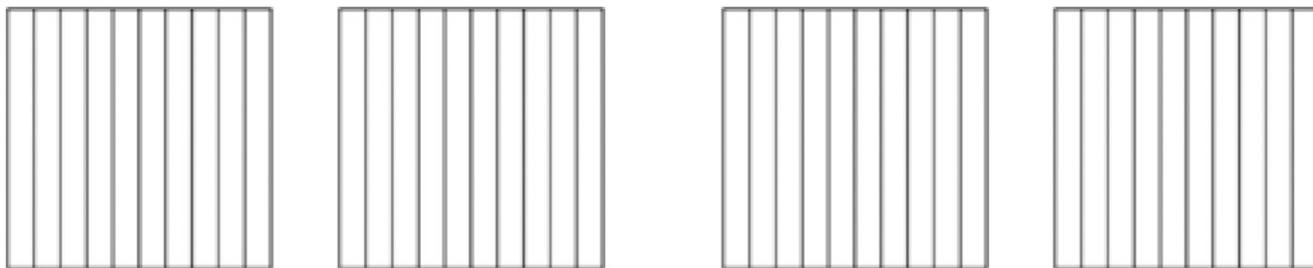
comparing with area models

Lesson 10:   Use area models and the number line to compare decimal numbers,
              and record comparisons using <, >, and =.

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While sewing, Kikanza cut 3 strips of colored fabric: a yellow 2.8-foot strip, an orange 2.08-foot strip, and a red 2.25-foot strip.

She put the shortest strip away in a drawer and placed the other 2 strips side by side on a table. Draw a tape diagram comparing the lengths of the strips on the table. Which measurement is longer?

Read   **Draw**   **Write**

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Lesson 11:   Compare and order mixed numbers in various forms.

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Name _____   Date _____

1. Plot the following points on the number line.

    a.   0.2, $\frac{1}{10}$, 0.33, $\frac{12}{100}$, 0.21, $\frac{32}{100}$

    0.1   0.2   0.3   0.4
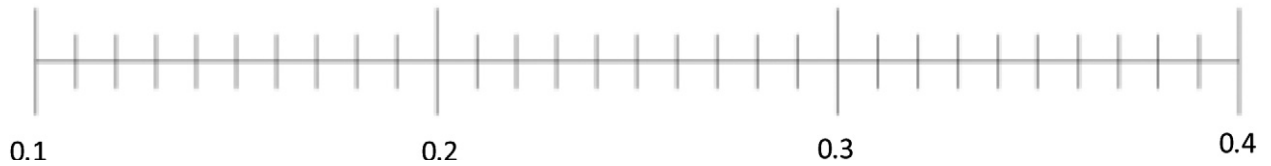
    b.   3.62, 3.7, $3\frac{85}{100}$, $\frac{38}{10}$, $\frac{364}{100}$

    3.6   3.7   3.8   3.9

    c. $6\frac{3}{10}$, 6.31, $\frac{628}{100}$, $\frac{62}{10}$, 6.43, 6.40

    6.2   6.3   6.4   6.5

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Lesson 11:   Compare and order mixed numbers in various forms.

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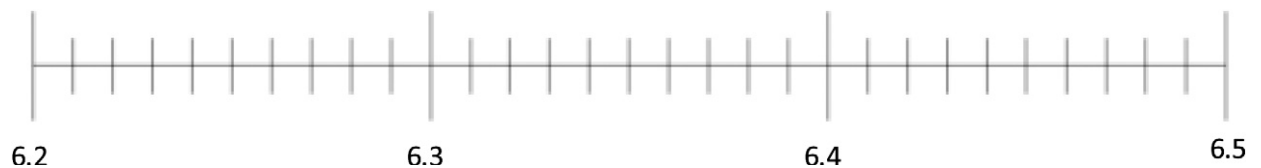
2. Arrange the following numbers in order from greatest to least using decimal form. Use the > symbol between each number.

a. $\frac{27}{10}$, 2.07, $\frac{27}{100}$, $2\frac{71}{100}$, $\frac{227}{100}$, 2.72

b. $12\frac{3}{10}$, 13.2, $\frac{134}{100}$, 13.02, $12\frac{20}{100}$

c. $7\frac{34}{100}$, $7\frac{4}{10}$, $7\frac{3}{10}$, $\frac{750}{100}$, 75, 7.2

3. In the long jump event, Rhonda jumped 1.64 meters. Mary jumped $1\frac{6}{10}$ meters. Kerri jumped $\frac{94}{100}$ meter. Michelle jumped 1.06 meters. Who jumped the farthest?

4. In December, $2\frac{3}{10}$ feet of snow fell. In January, 2.14 feet of snow fell. In February, $2\frac{19}{100}$ feet of snow fell, and in March, $1\frac{1}{10}$ feet of snow fell. During which month did it snow the most? During which month did it snow the least?

Lesson 11:   Compare and order mixed numbers in various forms.

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On Monday, $1\frac{7}{8}$ inches of rain fell. On Tuesday, it rained $\frac{1}{4}$ inch. What was the total rainfall for the two days?

Read   **Draw**   **Write**

Lesson 12:   Apply understanding of fraction equivalence to add tenths and hundredths.

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Name _____ Date _____

1. Complete the number sentence by expressing each part using hundredths. Model using the place value chart, as shown in part (a).

ones	•	tenths	hundredths
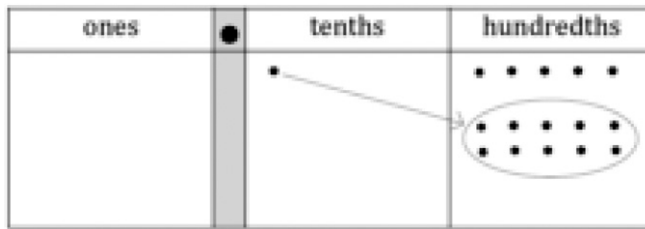
a. 1 tenth + 5 hundredths = _____ hundredths

ones	•	tenths	hundredths
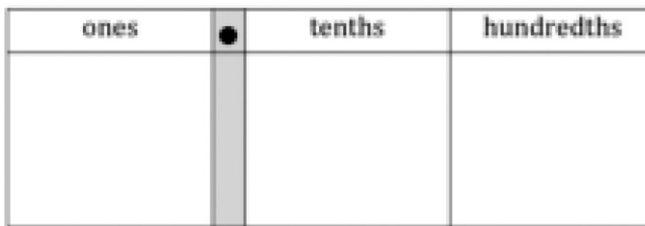
b. 2 tenths + 1 hundredth = _____ hundredths

ones	•	tenths	hundredths
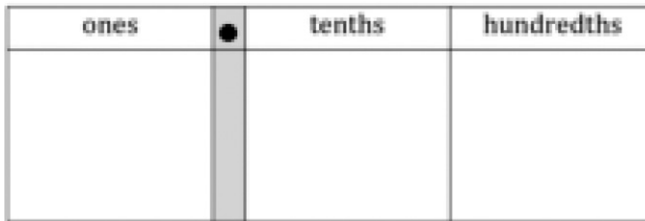
c. 1 tenth + 12 hundredths = _____ hundredths

2. Solve by converting all addends to hundredths before solving.

a. 1 tenth + 3 hundredths = _____ hundredths + 3 hundredths = _____ hundredths

b. 5 tenths + 12 hundredths = _____ hundredths + _____ hundredths = _____ hundredths

c. 7 tenths + 27 hundredths = _____ hundredths + _____ hundredths = _____ hundredths

d. 37 hundredths + 7 tenths = _____ hundredths + _____ hundredths = _____ hundredths

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Lesson 12: Apply understanding of fraction equivalence to add tenths and hundredths.

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ones	●	tenths	hundredths

area model and place value chart

Lesson 12:   Apply understanding of fraction equivalence to add tenths and   **93**
              hundredths.

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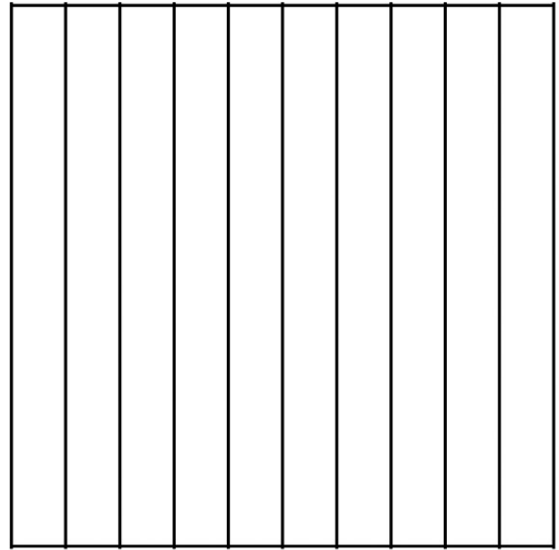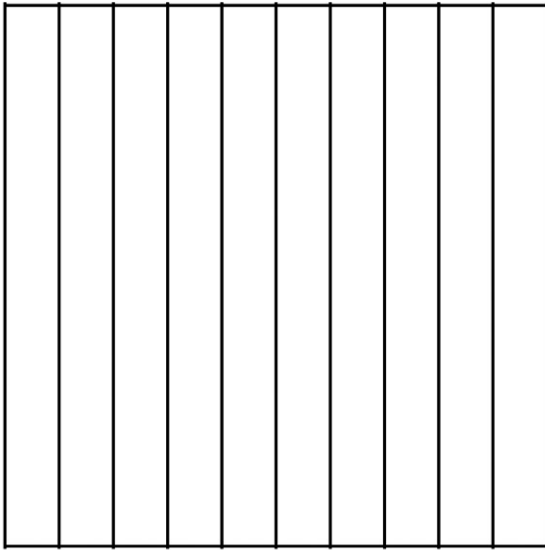
Name _____ Date _____

1. Solve. Convert tenths to hundredths before finding the sum. Rewrite the complete number sentence in decimal form. Problems 1(a) and 1(b) are partially completed for you.

a. $2\frac{1}{10} + \frac{3}{100} = 2\frac{10}{100} + \frac{3}{100} = $ _____ 2.1 + 0.03 = _____	b. $2\frac{1}{10} + 5\frac{3}{100} = 2\frac{10}{100} + 5\frac{3}{100} = $ _____
c. $3\frac{24}{100} + \frac{7}{10}$	d. $3\frac{24}{100} + 8\frac{7}{10}$

2. Solve. Then, rewrite the complete number sentence in decimal form.

a. $6\frac{9}{10} + 1\frac{10}{100}$	b. $9\frac{9}{10} + 2\frac{45}{100}$
c. $2\frac{4}{10} + 8\frac{90}{100}$	d. $6\frac{37}{100} + 7\frac{7}{10}$

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Lesson 13: Add decimal numbers by converting to fraction form.

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3. Solve by rewriting the expression in fraction form. After solving, rewrite the number sentence in decimal form.

a. 6.4 + 5.3	b. 6.62 + 2.98
c. 2.1 + 0.94	d. 2.1 + 5.94
e. 5.7 + 4.92	f. 5.68 + 4.9
g. 4.8 + 3.27	h. 17.6 + 3.59

Lesson 13: Add decimal numbers by converting to fraction form.

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Name _____   Date _____

1. Barrel A contains 2.7 liters of water. Barrel B contains 3.09 liters of water. Together, how much water do the two barrels contain?

2. Alissa ran a distance of 15.8 kilometers one week and 17.34 kilometers the following week. How far did she run in the two weeks?

Lesson 14:   Solve word problems involving the addition of measurements in decimal form.

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3. An apple orchard sold 140.5 kilograms of apples in the morning and 15.85 kilograms more apples in the afternoon than in the morning. How many total kilograms of apples were sold that day?

4. A team of three ran a relay race. The final runner's time was the fastest, measuring 29.2 seconds. The middle runner's time was 1.89 seconds slower than the final runner's. The starting runner's time was 0.9 seconds slower than the middle runner's. What was the team's total time for the race?

100   **Lesson 14:**   Solve word problems involving the addition of measurements in decimal form.

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At the end of the day, Cameron counted the money in his pockets. He counted 7 pennies, 2 dimes, and 2 quarters. Tell the amount of money, in cents, that was in Cameron's pockets.

_____

_____

_____

_____

Read   **Draw**   **Write**

Name _____ Date _____
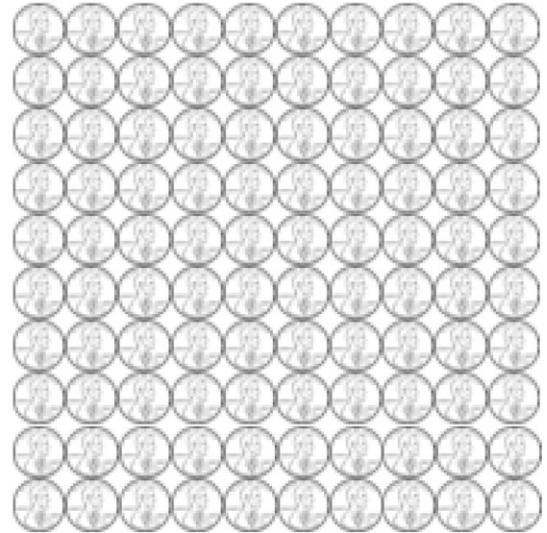
1. 100 pennies = $___.____   100¢ = $\frac{}{100}$ dollar

2. 1 penny = $___.____   1¢ = $\frac{}{100}$ dollar

3. 6 pennies = $___.____   6¢ = $\frac{}{100}$ dollar

4. 10 pennies = $___.____   10¢ = $\frac{}{100}$ dollar

5. 26 pennies = $___.____   26¢ = $\frac{}{100}$ dollar

6. 10 dimes = $___.____   100¢ = $\frac{}{10}$ dollar

7. 1 dime = $___.____   10¢ = $\frac{}{10}$ dollar

8. 3 dimes = $___.____   30¢ = $\frac{}{10}$ dollar

9. 5 dimes = $___.____   50¢ = $\frac{}{10}$ dollar

10. 6 dimes = $___.____   60¢ = $\frac{}{10}$ dollar

11. 4 quarters = $___.____   100¢ = $\frac{}{100}$ dollar

12. 1 quarter = $___.____   25¢ = $\frac{}{100}$ dollar

13. 2 quarters = $___.____   50¢ = $\frac{}{100}$ dollar

14. 3 quarters = $___.____   75¢ = $\frac{}{100}$ dollar

Lesson 15: Express money amounts given in various forms as decimal numbers.

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Solve. Give the total amount of money in fraction and decimal form.

15. 3 dimes and 8 pennies

16. 8 dimes and 23 pennies

17. 3 quarters 3 dimes and 5 pennies

18. 236 cents is what fraction of a dollar?

Solve. Express the answer as a decimal.

19. 2 dollars 17 pennies + 4 dollars 2 quarters

20. 3 dollars 8 dimes + 1 dollar 2 quarters 5 pennies

21. 9 dollars 9 dimes + 4 dollars 3 quarters 16 pennies

Lesson 15: Express money amounts given in various forms as decimal numbers.

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Name _____   Date _____

Use the RDW process to solve. Write your answer as a decimal.

1. Miguel has 1 dollar bill, 2 dimes, and 7 pennies. John has 2 dollar bills, 3 quarters, and 9 pennies.
    How much money do the two boys have in all?

2. Suilin needs 7 dollars 13 cents to buy a book. In her wallet, she finds 3 dollar bills, 4 dimes, and
    14 pennies. How much more money does Suilin need to buy the book?

3. Vanessa has 6 dimes and 2 pennies. Joachim has 1 dollar, 3 dimes, and 5 pennies. Jimmy has 5 dollars
    and 7 pennies. They want to put their money together to buy a game that costs $8.00. Do they have
    enough money to buy the game? If not, how much more money do they need?

4. A pen costs $2.29. A calculator costs 3 times as much as a pen. How much do a pen and a calculator cost together?

5. Krista has 7 dollars and 32 cents. Malory has 2 dollars and 4 cents. How much money does Krista need to give Malory so that each of them has the same amount of money?

Lesson 16:   Solve word problems involving money.

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Grade 4
Module 7

Name _____   Date _____

Use RDW to solve Problems 1–3.

1. Evan put a 2-pound weight on one side of the scale. How many 1-ounce
    weights will he need to put on the other side of the scale to make
    them equal?
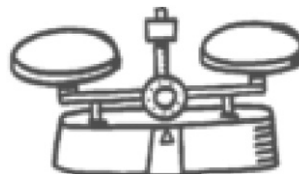
2. Julius put a 3-pound weight on one side of the scale. Abel put 35 1-ounce weights on the other side.
    How many more 1-ounce weights does Abel need to balance the scale?

3. Mrs. Upton's baby weighs 5 pounds and 4 ounces. How many total ounces does the baby weigh?

4. Complete the following conversion tables, and write the rule under each table.

a.

Pounds	Ounces
1	
3	
7	
10	
17	

The rule for converting pounds to ounces is _____.

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Lesson 1:   Create conversion tables for length, weight, and capacity units using
measurement tools, and use the tables to solve problems.

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b.

Feet	Inches
1	
2	
5	
10	
15	

c.

Yards	Feet
1	
2	
4	
10	
14	

The rule for converting feet to inches is

_____.

The rule for converting yards to feet is

_____.

5. Solve.

a. 3 feet 1 inch = _____ inches

b. 11 feet 10 inches = _____ inches

c. 5 yards 1 foot = _____ feet

d. 12 yards 2 feet = _____ feet

e. 27 pounds 10 ounces = _____ ounces

f. 18 yards 9 feet = _____ feet

g. 14 pounds 5 ounces = _____ ounces

h. 5 yards 2 feet = _____ inches

6. Answer *true* or *false* for the following statements. If the statement is false, change the right side of the comparison to make it true.

a. 2 kilograms > 2,600 grams   _____

b. 12 feet < 140 inches   _____

c. 10 kilometers = 10,000 meters   _____

Lesson 1: Create conversion tables for length, weight, and capacity units using measurement tools, and use the tables to solve problems.

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Name _____   Date _____

Use RDW to solve Problems 1–3.

1. Susie has 3 quarts of milk. How many pints does she have?

2. Kristin has 3 gallons 2 quarts of water. Alana needs the same amount of water but only has 8 quarts. How many more quarts of water does Alana need?

3. Leonard bought 4 liters of orange juice. How many milliliters of juice does he have?

4. Complete the following conversion tables and write the rule under each table.

a.

Gallons	Quarts
1	
3	
5	
10	
13	

The rule for converting gallons to quarts is

_____ .

b.

Quarts	Pints
1	
2	
6	
10	
16	

The rule for converting quarts to pints is

_____

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Lesson 2: Create conversion tables for length, weight, and capacity units using measurement tools, and use the tables to solve problems.

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5. Solve.

    a. 8 gallons 2 quarts = _____ quarts   b. 15 gallons 2 quarts = _____ quarts

    c. 8 quarts 2 pints = _____ pints   d. 12 quarts 3 pints = _____ cups

    e. 26 gallons 3 quarts = _____ pints   f. 32 gallons 2 quarts = _____ cups

6. Answer true or false for the following statements. If your answer is false, make the statement true.

    a. 1 gallon > 4 quarts   _____

    b. 5 liters = 5,000 milliliters   _____

    c. 15 pints < 1 gallon 1 cup   _____

7. Russell has 5 liters of a certain medicine. If it takes 2 milliliters to make 1 dose, how many doses can he make?

8. Each month, the Moore family drinks 16 gallons of milk and the Siler family goes through 44 quarts of milk. Which family drinks more milk each month?

9. Keith's lemonade stand served lemonade in glasses with a capacity of 1 cup. If he had 9 gallons of lemonade, how many cups could he sell?

Lesson 2:   Create conversion tables for length, weight, and capacity units using
                              measurement tools, and use the tables to solve problems.

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Name _____   Date _____

Use RDW to solve Problems 1–2.

1. Courtney needs to leave the house by 8:00 a.m. If she wakes up at 6:00 a.m., how many minutes does she have to get ready? Use the number line to show your work.

2. Giuliana's goal was to run a marathon in under 6 hours. What was her goal in minutes?

3. Complete the following conversion tables and write the rule under each table.

a.

Hours	Minutes
1	
3	
6	
10	
15	

The rule for converting hours to minutes and minutes to seconds is

_____.

b.

Days	Hours
1	
2	
5	
7	
10	

The rule for converting days to hours is

_____.

4. Solve.

   a. 9 hours 30 minutes = _____ minutes

   b. 7 minutes 45 seconds = _____ seconds

   c. 9 days 20 hours = _____ hours

   d. 22 minutes 27 seconds = _____ seconds

   e. 13 days 19 hours = _____ hours

   f. 23 hours 5 minutes = _____ minutes

5. Explain how you solved Problem 4(f).

6. How many seconds are in 14 minutes 43 seconds?

7. How many hours are there in 4 weeks 3 days?

Lesson 3: Create conversion tables for units of time, and use the tables to solve problems.

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Name _____   Date _____

Use RDW to solve the following problems.

1. Beth is allowed 2 hours of TV time each week. Her sister is allowed 2 times as much. How many minutes of TV can Beth's sister watch?

2. Clay weighs 9 times as much as his baby sister. Clay weighs 63 pounds. How much does his baby sister weigh in ounces?

3. Helen has 4 yards of rope. Daniel has 4 times as much rope as Helen. How many more feet of rope does Daniel have compared to Helen?

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4. A dishwasher uses 11 liters of water for each cycle. A washing machine uses 5 times as much water as a dishwasher uses for each load. Combined, how many milliliters of water are used for 1 cycle of each machine?

5. Joyce bought 2 pounds of apples. She bought 3 times as many pounds of potatoes as pounds of apples. The melons she bought were 10 ounces lighter than the total weight of the potatoes. How many ounces did the melons weigh?

Lesson 4: Solve multiplicative comparison word problems using measurement conversion tables.

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Name _____   Date _____

1. a.   Label the rest of the tape diagram below. Solve for the unknown.

3 feet

?

5 inches
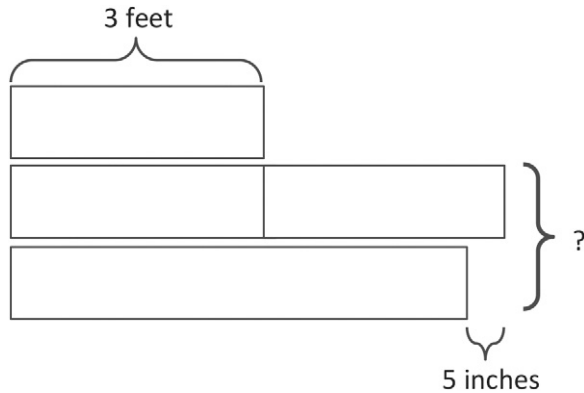
   b.   Write a problem of your own that could be solved using the diagram above.

2.   Create a problem of your own using the diagram below, and solve for the unknown.

4 pounds

?

30 ounces

Classmate:		**Problem Number:**	
Strategies my classmate used:			
Things my classmate did well:			
Suggestions for improvement:			
Changes I would make to my work based on my classmate's work:			

Classmate:		**Problem Number:**	
Strategies my classmate used:			
Things my classmate did well:			
Suggestions for improvement:			
Changes I would make to my work based on my classmate's work:			

peer share and critique form

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Name _____ Date _____

1. Determine the following sums and differences. Show your work.

   a. 3 qt + 1 qt = _____ gal

   b. 2 gal 1 qt + 3 qt =_____ gal

   c. 1 gal – 1 qt = _____ qt

   d. 5 gal – 1 qt =_____ gal _____ qt

   e. 2 c + 2 c = _____ qt

   f. 1 qt 1 pt + 3 pt = _____ qt

   g. 2 qt – 3 pt = _____ pt

   h. 5 qt – 3 c = _____ qt _____ c

2. Find the following sums and differences. Show your work.

   a. 6 gal 3 qt + 3 qt = _____ gal _____ qt

   b. 10 gal 3 qt + 3 gal 3 qt = _____ gal _____ qt

   c. 9 gal 1 pt – 2 pt = _____ gal _____ pt

   d. 7 gal 1 pt – 2 gal 7 pt = _____ gal _____ pt

   e. 16 qt 2 c + 4 c = _____ qt _____ c

   f. 6 gal 5 pt + 3 gal 3 pt = _____ gal _____ pt

3. The capacity of a pitcher is 3 quarts. Right now, it contains 1 quart 3 cups of liquid. How much more liquid can the pitcher hold?

4. Dorothy follows the recipe in the table to make her grandma's cherry lemonade.

   a. How much lemonade does the recipe make?

Cherry Lemonade	
Ingredient	**Amount**
Lemon Juice	5 pints
Sugar Syrup	2 cups
Water	1 gallon 1 quart
Cherry Juice	3 quarts

   b. How many more cups of water could Dorothy add to the recipe to make an exact number of gallons of lemonade?

Lesson 6: Solve problems involving mixed units of capacity.

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Samantha is making punch for a class picnic. There are 26 students in her class. Samantha uses 1 gallon 2 quarts of orange juice, 3 quarts of lemonade, and 1 gallon 3 quarts of sparkling water. How much punch did Samantha make? Will there be enough for each student to have two 1-cup servings of punch?

_____

_____

_____

Read   **Draw**   **Write**

Name _____ Date _____

1. Determine the following sums and differences. Show your work.

    a. 1 ft + 2 ft = _____ yd

    b. 3 yd 1 ft + 2 ft = _____ yd

    c. 1 yd – 1 ft = _____ ft

    d. 8 yd – 1 ft = _____ yd _____ ft

    e. 3 in + 9 in = _____ ft

    f. 6 in + 9 in = _____ ft _____ in

    g. 1 ft – 8 in = _____ in

    h. 5 ft – 8 in = _____ ft _____ in

2. Find the following sums and differences. Show your work.

    a. 5 yd 2 ft + 2 ft = _____ yd _____ ft

    b. 7 yd 2 ft + 2 yd 2 ft = _____ yd _____ ft

    c. 4 yd 1 ft – 2 ft = _____ yd _____ ft

    d. 6 yd 1 ft – 2 yd 2 ft = _____ yd _____ ft

    e. 6 ft 9 in + 4 in = _____ ft _____ in

    f. 4 ft 4 in + 3 ft 11 in = _____ ft _____ in

    g. 34 ft 4 in – 8 in = _____ ft _____ in

    h. 7 ft 1 in – 5 ft 10 in = _____ ft _____ in

3. Matthew is 6 feet 2 inches tall. His little cousin Emma is 3 feet 6 inches tall. How much taller is Matthew than Emma?

4. In gym class, Jared climbed 10 feet 4 inches up a rope. Then, he continued to climb up another 3 feet 9 inches. How high did Jared climb?

5. A quadrilateral has a perimeter of 18 feet 2 inches. The sum of three of the sides is 12 feet 4 inches.

    a. What is the length of the fourth side?

    b. An equilateral triangle has a side length equal to the fourth side of the quadrilateral. What is the perimeter of the triangle?

A sign next to the roller coaster says a person must be 54 inches tall to ride. At his last doctor's appointment, Hever was 4 feet 4 inches tall. He has grown 3 inches since then.

a. Is Hever tall enough to ride the roller coaster? By how many inches does he make or miss the minimum height?

b. Hever's father is 6 feet 3 inches tall. How much taller than the minimum height is his father?

Read **Draw** **Write**

Name _____   Date _____

1. Determine the following sums and differences. Show your work.

    a. 7 oz + 9 oz = _____ lb   b. 1 lb 5 oz + 11 oz = _____ lb

    c. 1 lb − 13 oz = _____ oz   d. 12 lb − 4 oz = _____ lb _____ oz

    e. 3 lb 9 oz + 9 oz = _____ lb _____ oz   f. 30 lb 9 oz + 9 lb 9 oz _____ lb _____ oz

    g. 25 lb 2 oz − 14 oz = _____ lb _____ oz   h. 125 lb 2 oz − 12 lb 3 oz = _____ lb _____ oz

2. The total weight of Sarah and Amanda's full backpacks is 27 pounds. Sarah's backpack weighs
    15 pounds 9 ounces. How much does Amanda's backpack weigh?

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3. In Emma's supply box, a pencil weighs 3 ounces. Her scissors weigh 3 ounces more than the pencil, and a bottle of glue weighs three times as much as the scissors. How much does the bottle of glue weigh in pounds and ounces?

4. Use the information in the chart about Jodi's school supplies to answer the following questions:

   a. On Mondays, Jodi packs only her laptop and supply case into her backpack. How much does her full backpack weigh?

Textbook	Supply Case	Binder
3 lb 8 oz	1 lb	2 lb 5 oz

Laptop	Notebook	Backpack (empty)
5 lb 12 oz	11 oz	2 lb 14 oz

   b. On Tuesdays, Jodi brings her laptop, supply case, two notebooks, and two textbooks in her backpack. On Fridays, Jodi only packs her binder and supply case. How much less does Jodi's full backpack weigh on Friday than it does on Tuesday?

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Name _____   Date _____

1. Determine the following sums and differences. Show your work.

   a. 23 min + 37 min = _____ hr

   b. 1 hr 11 min + 49 min = _____ hr

   c. 1 hr − 12 min = _____ min

   d. 4 hr − 12 min = _____ hr _____ min

   e. 22 sec + 38 sec = _____ min

   f. 3 min − 45 sec = _____ min _____ sec

2. Find the following sums and differences. Show your work.

   a. 3 hr 45 min + 25 min = _____ hr _____ min

   b. 2 hr 45 min + 6 hr 25 min = _____ hr _____ min

   c. 3 hr 7 min − 42 min = _____ hr _____ min

   d. 5 hr 7 min − 2 hr 13 min = _____ hr _____ min

   e. 5 min 40 sec + 27 sec = _____ min _____ sec

   f. 22 min 48 sec − 5 min 58 sec = _____ min _____ sec

3. At the cup-stacking competition, the first place finishing time was 1 minute 52 seconds. That was 31 seconds faster than the second place finisher. What was the second place time?

4. Jackeline and Raychel have 5 hours to watch three movies that last 1 hour 22 minutes, 2 hours 12 minutes, and 1 hour 57 minutes, respectively.

    a. Do the girls have enough time to watch all three movies? Explain why or why not.

    b. If Jackeline and Raychel decide to watch only the two longest movies and take a 30-minute break in between, how much of their 5 hours will they have left over?

160   **Lesson 9:**   Solve problems involving mixed units of time.

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Name _____   Date _____

Use RDW to solve the following problems.

1. Paula's time swimming in the Ironman Triathlon was 1 hour 25 minutes. Her time biking was 5 hours longer than her swimming time. She ran for 4 hours 50 minutes. How long did it take her to complete all three parts of the race?

2. Nolan put 7 gallons 3 quarts of gas into his car on Monday and twice as much on Saturday. What was the total amount of gas put into the car on both days?

3. One pumpkin weighs 7 pounds 12 ounces. A second pumpkin weighs 10 pounds 4 ounces. A third pumpkin weighs 2 pounds 9 ounces more than the second pumpkin. What is the total weight of all three pumpkins?

4. Mr. Lane is 6 feet 4 inches tall. His daughter, Mary, is 3 feet 8 inches shorter than her father. His son is 9 inches taller than Mary. How many inches taller is Mr. Lane than his son?

Lesson 10:   Solve multi-step measurement word problems.

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Name _____   Date _____

Use RDW to solve the following problems.

1. Lauren ran a marathon and finished 1 hour 15 minutes after Amy, who had a time of 2 hours 20 minutes. Cassie finished 35 minutes after Lauren. How long did it take Cassie to run the marathon?

2. Chef Joe has 8 lb 4 oz of ground beef in his freezer. This is $\frac{1}{3}$ of the amount needed to make the number of burgers he planned for a party. If he uses 4 oz of beef for each burger, how many burgers is he planning to make?

3. Sarah read for 1 hour 17 minutes each day for 6 days. If she took 3 minutes to read each page, how many pages did she read in 6 days?

4. Grades 3, 4, and 5 have their annual field day together. Each grade level is given 16 gallons of water. If there are a total of 350 students, will there be enough water for each student to have 2 cups?

Lesson 11:   Solve multi-step measurement word problems.

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A rectangular tile has a width of 1 foot 6 inches and length of 2 feet. What is the perimeter of the tile?

_____

_____

_____

_____

Read   **Draw**   **Write**

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Lesson 12:   Use measurement tools to convert mixed number measurements to
               smaller units.

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Name _____   Date _____

1. Draw a tape diagram to show 1 yard divided into 3 equal parts.

   a. $\frac{1}{3}$ yd = _____ ft

   b. $\frac{2}{3}$ yd = _____ ft

   c. $\frac{3}{3}$ yd = _____ ft

2. Draw a tape diagram to show $2\frac{2}{3}$ yards = 8 feet.

3. Draw a tape diagram to show $\frac{3}{4}$ gallon = 3 quarts.

4. Draw a tape diagram to show $3\frac{3}{4}$ gallons = 15 quarts.

5. Solve the problems using whatever tool works best for you.

   a. $\frac{1}{12}$ ft = _____ in

   1 foot

   b. $\frac{}{12}$ ft = $\frac{1}{2}$ ft = _____ in

   c. $\frac{}{12}$ ft = $\frac{1}{4}$ ft = _____ in

   0 1 2 3 4 5 6 7 8 9 10 11 12

   inches

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Lesson 12:   Use measurement tools to convert mixed number measurements to smaller units.

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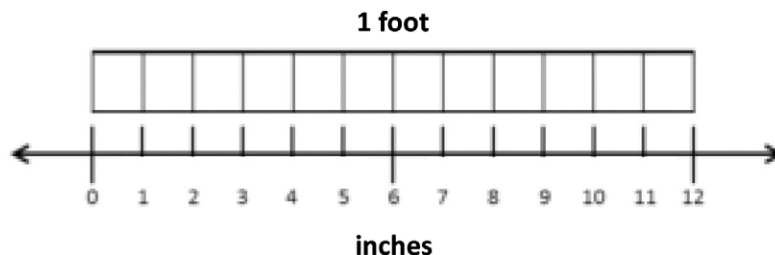
d. $\frac{}{12}$ ft = $\frac{3}{4}$ ft = _____ in

e. $\frac{}{12}$ ft = $\frac{1}{3}$ ft = _____ in

f. $\frac{}{12}$ ft = $\frac{2}{3}$ ft = _____ in

6. Solve.

a. $1\frac{1}{3}$ yd = _____ ft	b. $4\frac{2}{3}$ yd = _____ ft
c. $2\frac{1}{2}$ gal = _____ qt	d. $7\frac{3}{4}$ gal = _____ qt
e. $1\frac{1}{2}$ ft = _____ in	f. $6\frac{1}{2}$ ft = _____ in
g. $1\frac{1}{4}$ ft = _____ in	h. $6\frac{1}{4}$ ft = _____ in

174   **Lesson 12:**   Use measurement tools to convert mixed number measurements to smaller units.

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Micah used $3\frac{3}{4}$ gallons of paint to paint his bathroom. He used 3 times as much paint to paint his bedroom. How many quarts of paint did it take to paint his bedroom?

Read   **Draw**   **Write**

Lesson 13: Use measurement tools to convert mixed number measurements to smaller units.

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Name _____   Date _____

1. Solve.

    a. $\frac{1}{16}$ pound = _____ ounce

    b. $\frac{}{16}$ pound = $\frac{1}{2}$ pound = _____ ounces

    c. $\frac{}{16}$ pound = $\frac{1}{4}$ pound = _____ ounces

    d. $\frac{}{16}$ pound = $\frac{3}{4}$ pound = _____ ounces

    e. $\frac{}{16}$ pound = $\frac{1}{8}$ pound = _____ ounces

    f. $\frac{}{16}$ pound = $\frac{3}{8}$ pound = _____ ounces
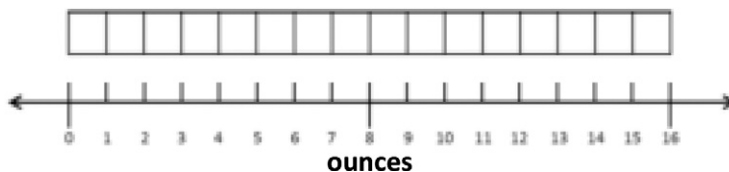
2. Draw a tape diagram to show $2\frac{1}{2}$ pounds = 40 ounces.

3.

1 hour
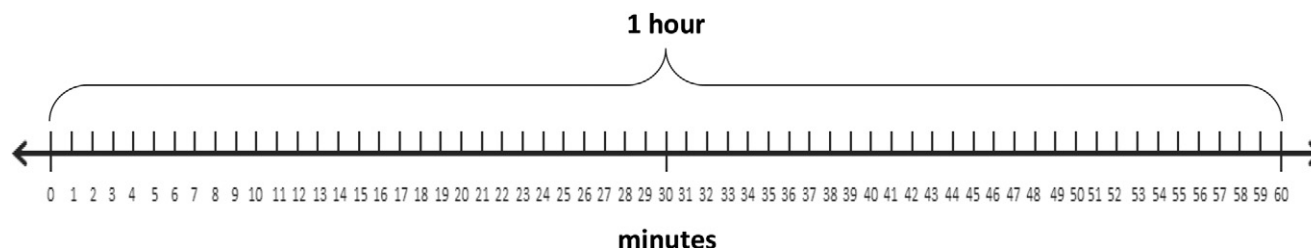
minutes

    a. $\frac{1}{60}$ hour = _____ minute

    b. $\frac{}{60}$ hour = $\frac{1}{2}$ hour = _____ minutes

    c. $\frac{}{60}$ hour = $\frac{1}{4}$ hour = _____ minutes

4. Draw a tape diagram to show that $1\frac{1}{2}$ hours = 90 minutes.

EUREKA MATH®   **Lesson 13:**   Use measurement tools to convert mixed number measurements to   **179**
                                      smaller units.

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5. Solve.

a. $1\frac{1}{8}$ pounds = _____ ounces	b. $3\frac{3}{8}$ pounds = _____ ounces
c. $5\frac{3}{4}$ lb = _____ oz	d. $5\frac{1}{2}$ lb = _____ oz
e. $1\frac{1}{4}$ hours = _____ minutes	f. $3\frac{1}{2}$ hours = _____ minutes
g. $2\frac{1}{4}$ hr = _____ min	h. $5\frac{1}{2}$ hr = _____ min
i. $3\frac{1}{3}$ yards = _____ feet	j. $7\frac{2}{3}$ yd = _____ ft
k. $4\frac{1}{2}$ gallons = _____ quarts	l. $6\frac{3}{4}$ gal = _____ qt
m. $5\frac{3}{4}$ feet = _____ inches	n. $8\frac{1}{3}$ ft = _____ in

Lesson 13: Use measurement tools to convert mixed number measurements to smaller units.

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Name _____ Date _____

Use RDW to solve the following problems.

1. A cartoon lasts $\frac{1}{2}$ hour. A movie is 6 times as long as the cartoon. How many minutes does it take to watch both the cartoon and the movie?

2. A large bench is $7\frac{1}{6}$ feet long. It is 17 inches longer than a shorter bench. How many inches long is the shorter bench?

3. The first container holds 4 gallons 2 quarts of juice. The second container can hold $1\frac{3}{4}$ gallons more than the first container. Altogether, how much juice can the two containers hold?

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Lesson 14: Solve multi-step word problems involving converting mixed number measurements to a single unit.

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4. A girl's height is $3\frac{1}{3}$ feet. A giraffe's height is 3 times that of the girl's. How many inches taller is the giraffe than the girl?

5. Five ounces of pretzels are put into each bag. How many bags can be made from $22\frac{3}{4}$ pounds of pretzels?

6. Twenty servings of pancakes require 15 ounces of pancake mix.

   a. How much pancake mix is needed for 120 servings?

   b. Extension: The mix is bought in $2\frac{1}{2}$-pound bags. How many bags will be needed to make 120 servings?

Lesson 14: Solve multi-step word problems involving converting mixed number measurements to a single unit.

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Emma's rectangular bedroom is 11 ft long and 12 ft wide. Draw and label a diagram of Emma's bedroom. How many square feet of carpet does Emma need to cover her bedroom floor?

_____

_____

_____

Read　　　　**Draw**　　　　**Write**

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Name _____ Date _____

1. Emma's rectangular bedroom is 11 ft long and 12 ft wide with an attached closet that is 4 ft by 5 ft. How many square feet of carpet does Emma need to cover both the bedroom and closet?

2. To save money, Emma is no longer going to carpet her closet. In addition, she wants one 3 ft by 6 ft corner of her bedroom to be wood floor. How many square feet of carpet will she need for the bedroom now?

Lesson 15: Create and determine the area of composite figures.

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3. Find the area of the figure pictured to the right.

20 ft

5 ft

15 ft

12 ft

5 ft
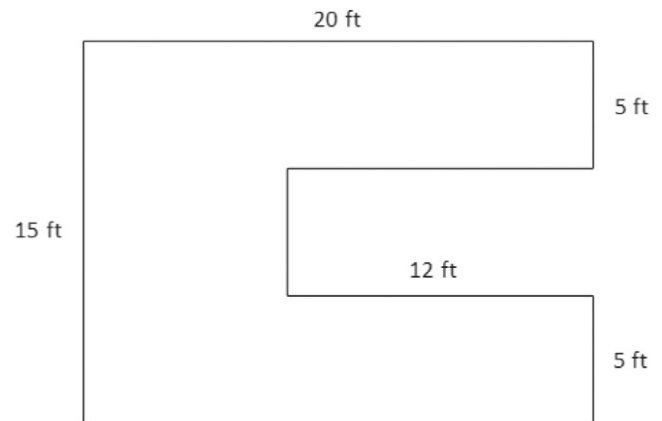
4. Label the sides of the figure below with measurements that make sense. Find the area of the figure.

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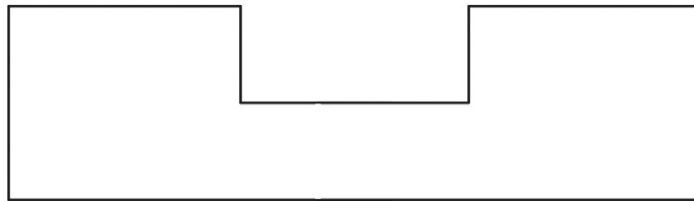
5. Peterkin Park has a square fountain with a walkway around it. The fountain measures 12 feet on each side. The walkway is $3\frac{1}{2}$ feet wide. Find the area of the walkway.

6. If 1 bag of gravel covers 9 square feet, how many bags of gravel will be needed to cover the entire walkway around the fountain in Peterkin Park?

Name _____   Date _____

Work with your partner to create each floor plan on a separate piece of paper, as described below.

You should use a protractor and a ruler to create each floor plan and be sure each rectangle you create has two sets of parallel lines and four right angles.

Be sure to label each part of your model with the correct measurement.

1. The bedroom in Samantha's dollhouse is a rectangle 26 centimeters long and 15 centimeters wide. It has a rectangular bed that is 9 centimeters long and 6 centimeters wide. The two dressers in the room are each 2 centimeters wide. One measures 7 centimeters long, and the other measures 4 centimeters long. Create a floor plan of the bedroom containing the bed and dressers. Find the area of the open floor space in the bedroom after the furniture is in place.

2. A model of a rectangular pool is 15 centimeters long and 10 centimeters wide. The walkway around the pool is 5 centimeters wider than the pool on each of the four sides. In one section of the walkway, there is a flowerbed that is 3 centimeters by 5 centimeters. Create a diagram of the pool area with the surrounding walkway and flowerbed. Find the area of the open walkway around the pool.