
Proclamation Year:	2014
Publisher:	ORIGO Education
Subject Area /Course:	Mathematics / Grade 4 (2 of 3)

Indicate if the changes in the new edition involve content reviewed and accepted by the state review panel to determine coverage of the Texas Essential Knowledge and Skills (TEKS), English Language Proficiency Standards (ELPS), or Texas Prekindergarten Guidelines (TPG) by selecting a box below.

☒ TEKS ☐ ELPS ☐ TPG ☐ TEKS and ELPS

Adopted Program Information:

[illegible]

New Program Information:

[illegible]

Substitution Request

Adopted Component Information:

You must submit a separate form for each component title and ISBN.

Component Title:	Student Journal 4												
Component ISBN:	9	7	8	1	9	2	1	9	5	9	2	4	0
Identical Component Title:	Click here to enter the identical program title, if applicable.												
Identical Component ISBN:	0	0	0	0	0	0	0	0	0	0	0	0	0

New Component Information:

New Component Title:	Student Journal 4 Texas												
New Component ISBN:	9	7	8	1	9	2	1	9	5	9	2	4	0
New Identical Component Title:	Click here to enter the identical program title, if applicable.												
New Identical Component ISBN:	0	0	0	0	0	0	0	0	0	0	0	0	0

Access Information:

Use the table below to provide access information to the adopted version of the instructional materials and the proposed new content.

	URL	Username	Password
Adopted content:	https://www.origoslate.com/tx/sjbook?c=1&l=en&g=4	origo	Q2V3swmTE
Proposed new content:	https://www.origoslate.com/tx/sjbook?c=2&l=en&g=4	origo	Q2V3swmTE

Publisher's rationale for the substitution

Substitution Request

ORIGO Education is requesting permission to substitute the ORIGO Stepping Stones 2013 program with a new edition of the program edited specifically for Texas customers and subsequently called Texas Stepping Stones. ORIGO Stepping Stones 2013 was developed for the Common Core State Standards (CCSS), so it was absolutely necessary to implement changes to provide 100% coverage at each grade level to the Texas Essential Knowledge and Skills (TEKS). To create this edited version, ORIGO removed all reference to the CCSS; extraneous lessons within grades; and added new lessons that more directly supported the TEKS. ORIGO also implemented minor changes to titles, questions, and activities to better reflect the language used in the TEKS. Finally, ORIGO believed it was necessary to change certain names of people which were used for context in word problems within the program. In so doing, ORIGO replaced certain names with those that reflected the diverse student population in Texas at that time.

Side-by-side comparison:

Any content that has been changed in the component listed on the previous page should be documented in this side-by-side comparison. You must submit a separate request for each component.

SE Breakout (s) and Citation Type(s)	Description of the specific location and hyperlink to the exact location of adopted content	Description of the specific location and hyperlink to the exact location of the proposed new content
Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
2.D Narrative	Teacher Notes 8.6, Step 3 https://www.origoslate.com/tx/slaunch?c=1&t=page&i=21127	SS TX Teacher Notes 1.8, Step 3 https://www.origoslate.com/tx/slaunch?c=2&t=page&i=27517
Publisher's rationale for the change		
Page moved and adjusted to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
Significant adjustments made to focus solely on rounding and to place greater emphasis on place value and relative position.		

Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)

step 3 teaching the lesson

Project the number line diagram and say, **We are going to use a number line to help us round 114,297 to the nearest hundred thousand. What are the two possible numbers we could round to?** (100,000 and 200,000.) Invite a student to write 100,000 and 200,000 in the boxes on each end of the number line. Ask, **What is the distance between 100,000 and 200,000?** (100,000.) Emphasize that the distance between the two possible numbers should be the same amount as the place value the number needs to be rounded to. In this case, the number 114,297 is being rounded to the nearest 100,000.

Ask, **What should each of the marks be labeled?** Encourage students to describe that the distance between each of the marks is 10,000. Point to the middle mark and ask, **What should we label this mark?** Invite a student to label the middle mark 150,000. Ask, **Where is 114,297 located on the number line?** Invite a confident student to mark the location on the number line. Ask, **Is 114,297 closer to 100,000 or to 200,000?** (100,000.) **Which hundred thousand would we round 150,000 to: 100,000 or 200,000?** Remind students that when a number falls exactly halfway between the two possible numbers the original number is rounded to the greater number.

Repeat the discussion for locating and rounding 135,234 and then 131,417.

Project the Step In discussion from Student Journal 8.6 and work through the questions with the whole class. Read the Step Up and Step Ahead instructions with the students. Make sure they know what to do and then have them work independently to complete the task. Some students may need a number line to help round the numbers. Encourage them to use the number line in the discussion on page 186.

Insert a screenshot of your proposed **new** content.

Substitution Request

step 3 teaching the lesson

- Project the next number line diagram and say, **We are going to use a number line to help us round 114,297 to the nearest hundred thousand. What are the two possible numbers we could round to?** (100,000 and 200,000.) Invite a student to write 100,000 and 200,000 in the boxes on each end of the number line. Ask, **What is the distance between 100,000 and 200,000?** (100,000.) Emphasize that the distance between the two possible numbers should be the same amount as the place value the number needs to be rounded to. In this case, the number 114,297 is being rounded to the nearest 100,000.
- Ask, **What should each of the marks be labeled?** Encourage students to describe that the distance between each of the marks is 10,000. Point to the middle mark and ask, **What should we label this mark?** Invite a student to label the middle mark 150,000. Ask, **Where is 114,297 located on the number line?** Invite another student to mark the location on the number line. Ask, **Is 114,297 closer to 100,000 or to 200,000?** (100,000.) **Which hundred thousand would we round 150,000 to: 100,000 or 200,000?** Remind students that when a number falls exactly halfway between the two possible numbers the original number is rounded to the greater number.
- Repeat the discussion for locating and rounding 135,234 and then 131,417.
- Form the students into pairs and provide each pair with a six-digit mix-and-match numeral card. Challenge each group to round their number to the nearest hundred thousand. Move between the students and ask them to identify the digit that helped them round their number. Repeat the activity by having the students round their number to the nearest ten thousand, thousand, hundred, and then ten. For each situation ask, **How did you round each number? What digit(s) did you look at to help you decide?**
- Project the Step In discussion from Student Journal 1.8 and work through the questions with the whole class. Clarify that the attendance figures are for the whole season – not one game. Read the Step Up and Step Ahead instructions with the students. Make sure they know what to do and then have them work independently to complete the task.

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Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
2.D Activity	Page 186 & 187, Student Journal 8.6, Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=186 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=186	Page 22 & 23, SS TX Student Journal 1.8, Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=22 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=23

Substitution Request

Publisher's rationale for the change

Page moved and adjusted to improve content coherence and content alignment to TEKS.

Publisher's description of the change

Significant adjustments made to focus solely on rounding and to place greater emphasis on place value and relative position.

Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)

8.6 Comparing and Rounding Six-Digit Numbers

These tables show the approximate populations of ten cities.

City	Population	City	Population
Billings, MT	104,170	Lansing, MI	18,247
Cary, NC	135,234	McKinney, TX	131,117
Everett, WA	103,019	Palm Bay, FL	103,140
Fargo, ND	125,549	Springfield, MA	153,060
Green Bay, WI	104,057	Sunnyvale, CA	140,081

How can you figure out which city has the greatest population? Which city has the least population? Which city has the greater population: Everett or Palm Bay? How do you know? Which cities have populations that are about 100,000? How can you figure it out? What helps you?

Draw an arrow on this number line to show the approximate location of Springfield's population.

If you had to round Sunnyvale's population to the nearest ten thousand, what number would you write? Why?

Step Up Use the tables and number line above to help you complete these.

- Round each city's population to the nearest hundred thousand.
a. Springfield _____ b. Lansing _____
- Round each city's population to the nearest ten thousand.
a. Green Bay _____ b. Cary _____
- Round each city's population to the nearest thousand.
a. McKinney _____ b. Fargo _____

Step Ahead Use each digit once. Write a number that is closest to 250,000.

5 3 9 0 1 6

Insert a screenshot of your proposed **new** content.

Step In Rounding Six-Digit Numbers

This table shows the annual home game attendance totals for some NFL teams.

Team	Total
Dallas	704,345
NY Giants	641,194
Green Bay	623,977
Washington	617,767
NY Jets	615,656

Which team had the greatest total attendance? Which teams had a total of more than 600,000 spectators? Which teams had about 620,000 spectators? How can you figure this out? Which digits will you look at to help you decide?

On this number line, draw an arrow to show the total attendance at the NY Giants home games.

If you had to round this number to the nearest ten thousand, what number would you write?

Step Up Use the table and number line above to help you complete these.

- Round the total attendance for these teams to the nearest hundred thousand.
a. Dallas _____ b. NY Giants _____
- Round the total attendance for these teams to the nearest ten thousand.
a. NY Jets _____ b. Green Bay _____
- Round the total attendance for these teams to the nearest thousand.
a. Washington _____ b. Dallas _____

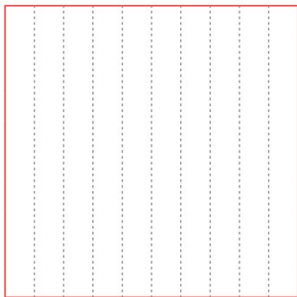
Step Ahead Use each digit once. Write the number that is closest to 250,000.

5 3 9 0 1 6

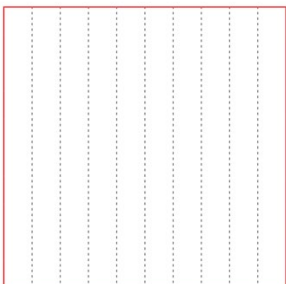
Substitution Request

SE Breakout(s) and Citation Type(s)	Description of the specific location and hyperlink to the exact location of adopted content	Description of the specific location and hyperlink to the exact location of the proposed new content
Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
2.E.i Activity	Teacher Notes 11.4, Resources, Staticware https://www.origoslate.com/tx/slaunch?c=1&t=resource&i=36987	SS TX Teacher Notes 8.3, Resources, Staticware https://www.origoslate.com/tx/slaunch?c=2&t=resource&i=70140
Publisher's rationale for the change		
Image moved to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
No changes to content. Change to the placement of the image only.		

Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)



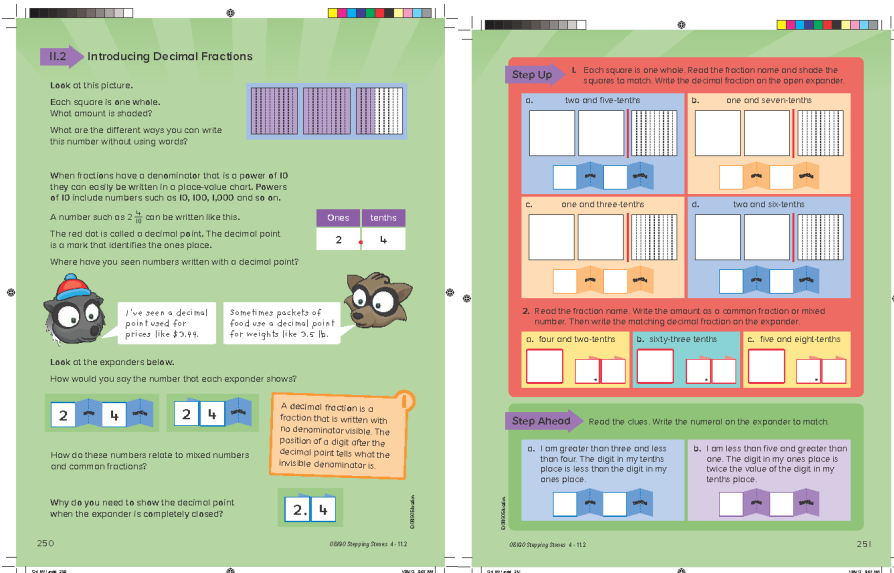
Insert a screenshot of your proposed **new** content.



Substitution Request

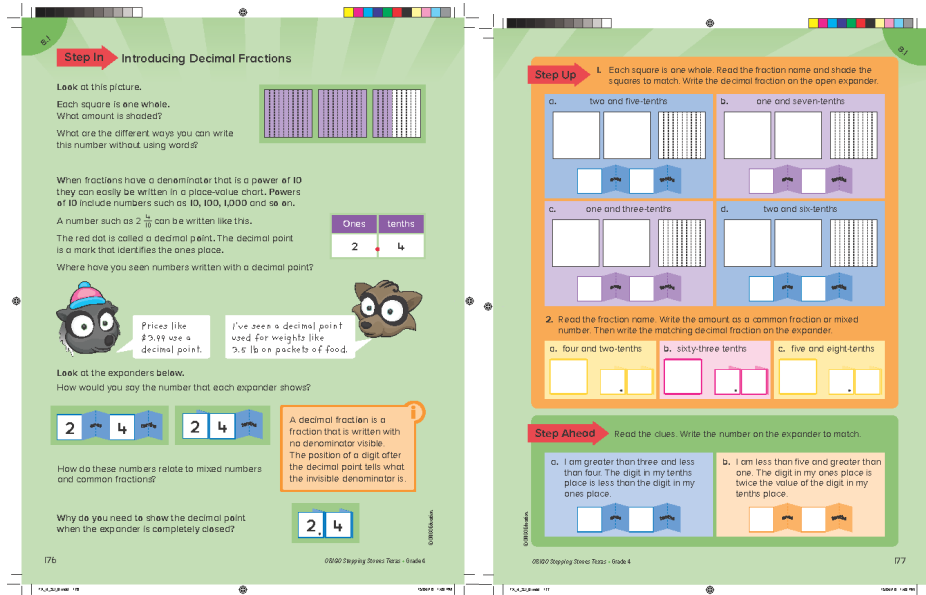
SE Breakout (s) and Citation Type(s)	Description of the specific location and hyperlink to the exact location of adopted content	Description of the specific location and hyperlink to the exact location of the proposed new content
Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
2.E.i Narrative	Page 250 & 251, Student Journal 11.2, Discussion https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=250 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=251	Page 176 & 177, SS TX Student Journal 8.1, Step In https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=176 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=177
Publisher's rationale for the change		
Page moved to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
No changes to content. Change to the placement of the content only.		

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Insert a screenshot of your proposed **new** content.

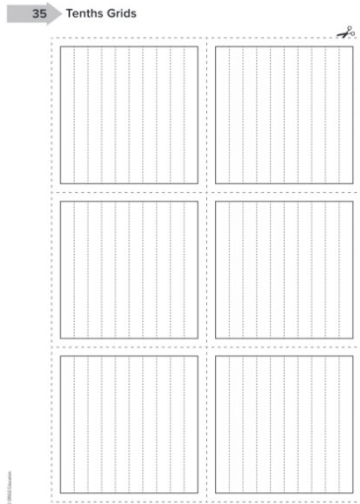
Substitution Request



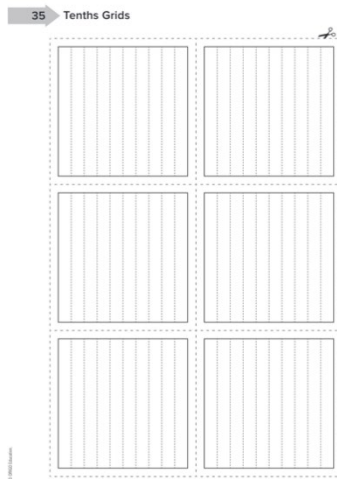
SE Breakout(s) and Citation Type(s)	Description of the specific location and hyperlink to the exact location of adopted content	Description of the specific location and hyperlink to the exact location of the proposed new content
Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
2.E.i Narrative	Teacher Notes 11.2, Differentiation, Support 12 https://www.origoslate.com/tx/slaunch?c=1&t=r&esource&i=36791	SS TX Teacher Notes 8.1, Differentiation, Support 35 https://www.origoslate.com/tx/slaunch?c=2&t=r&esource&i=71819
Publisher's rationale for the change		
Page moved to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
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Substitution Request



Insert a screenshot of your proposed **new** content.



SE Breakout(s) and Citation Type(s)	Description of the specific location and hyperlink to the exact location of adopted content	Description of the specific location and hyperlink to the exact location of the proposed new content
Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
2.E.ii Narrative/Activity	Page 250 & 251, Student Journal 11.2, Discussion & Step Up https://www.origoslate.com/tx/sjpage?c=1&len&g=4&p=250 https://www.origoslate.com/tx/sjpage?c=1&len&g=4&p=251	Page 176 & 177, SS TX Student Journal 8.1, Step In & Step Up https://www.origoslate.com/tx/sjpage?c=2&len&g=4&p=176 https://www.origoslate.com/tx/sjpage?c=2&len&g=4&p=177

Substitution Request

Publisher's rationale for the change

Page moved to improve content coherence and content alignment to TEKS.

Publisher's description of the change

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11.2 Introducing Decimal Fractions

Look at this picture.
Each square is one whole.
What amount is shaded?
What are the different ways you can write this number without using words?

When fractions have a denominator that is a power of 10 they can easily be written in a place-value chart. Powers of 10 include numbers such as 10, 100, 1,000 and so on.

A number such as $2\frac{4}{10}$ can be written like this.

The red dot is called a decimal point. The decimal point is a mark that identifies the ones place.

Where have you seen numbers written with a decimal point?

Look at the expanders below.
How would you say the number that each expander shows?

How do these numbers relate to mixed numbers and common fractions?

Why do you need to show the decimal point when the expander is completely closed?

Step Up

1. Each square is one whole. Read the fraction name and shade the squares to match. Write the decimal fraction on the open expander.

a. two and five-tenths
b. one and seven-tenths
c. one and three-tenths
d. two and six-tenths

2. Read the fraction name. Write the amount as a common fraction or mixed number. Then write the matching decimal fraction on the expander.

a. four and two-tenths
b. sixty-three tenths
c. five and eight-tenths

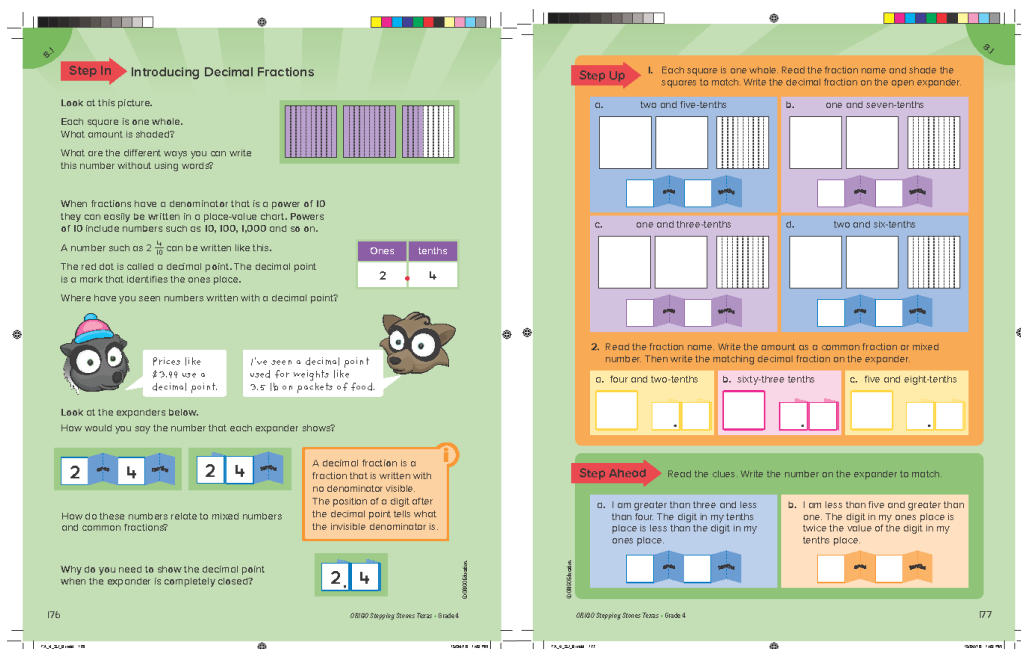
Step Ahead

Read the clues. Write the numeral on the expander to match.

a. I am greater than three and less than four. The digit in my tenths place is less than the digit in my ones place.
b. I am less than five and greater than one. The digit in my ones place is twice the value of the digit in my tenths place.

Insert a screenshot of your proposed **new** content.

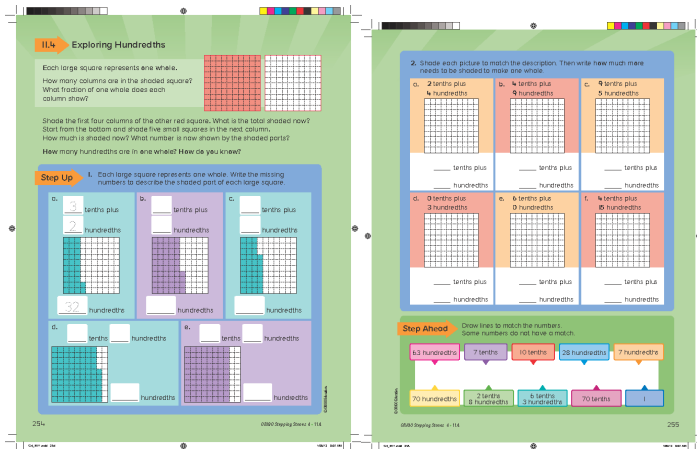
Substitution Request



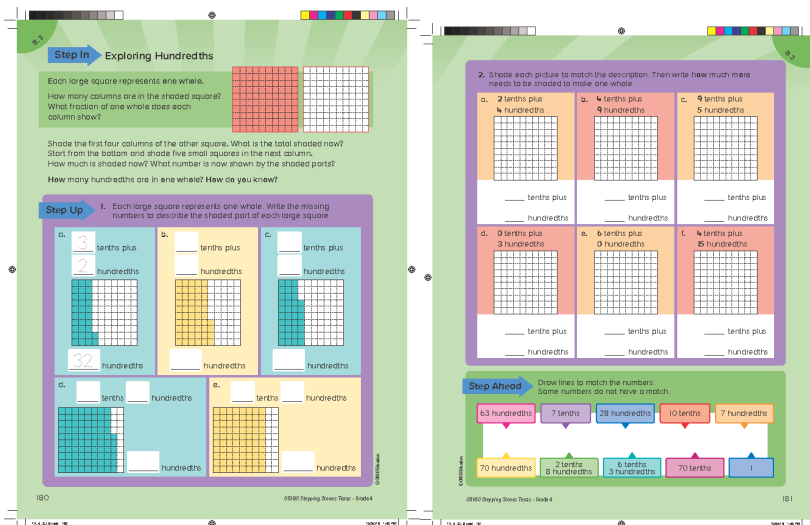
SE Breakout(s) and Citation Type(s)	Description of the specific location and hyperlink to the exact location of adopted content	Description of the specific location and hyperlink to the exact location of the proposed new content
Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
2.E.ii Narrative/Activity	Page 254 & 255, Student Journal 11.4, Discussion & Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=254 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=255	Page 180 & 181, SS TX Student Journal 8.3, Step In & Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=180 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=181
Publisher's rationale for the change		
Page moved to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
No changes to content. Change to the placement of the content only.		

Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)

Substitution Request



Insert a screenshot of your proposed **new** content.



SE Breakout (s) and Citation Type(s)	Description of the specific location and hyperlink to the exact location of adopted content	Description of the specific location and hyperlink to the exact location of the proposed new content
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2.E.iii Narrative	Page 280 & 281, Student Journal 12.5, Discussion & Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=280 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=281	Page 202 & 203, SS TX Student Journal 9.2, Step In & Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=202 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=203
Publisher's rationale for the change		

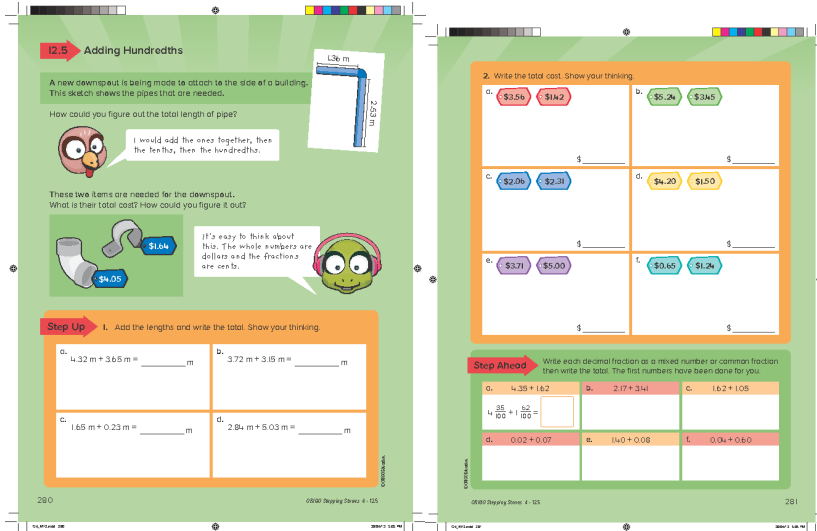
Substitution Request

Page moved to improve content coherence and content alignment to TEKS.

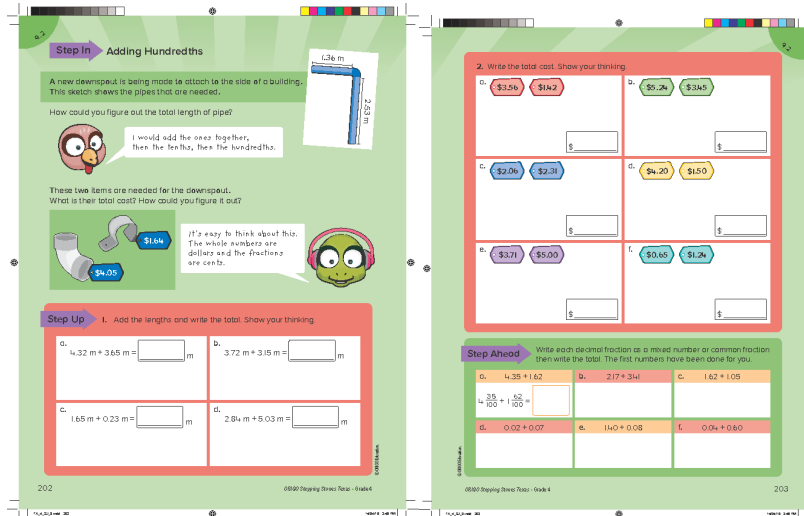
Publisher's description of the change

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Substitution Request

Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
2.E.iii Activity	Grade 4, Module 12, More Math, Problem Solving 2 – Spending https://www.origoslate.com/tx/slaunch?c=1&t=page&i=21503	SS TX Grade 4, Module 9, More Math, Problem Solving 2 – Adding Decimal Fractions Involving Money https://www.origoslate.com/tx/slaunch?c=2&t=page&i=21248
Publisher’s rationale for the change		
Page moved and adjusted to improve content coherence and content alignment to TEKS.		
Publisher’s description of the change		
Activity adjusted to focus on adding amounts of money as opposed to spending.		

Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)

spending

In this activity, students use a strategy of their choice to solve a problem involving dollars and cents.

preparation

Each student will need:

1 copy of Problem Solving 2

activity

Distribute a copy of the support page to each student. Read the problem together with the class to ensure understanding. Ask, **What information would help you answer the question?** Encourage students to describe that they need to find the total cost of all the items (\$14.69) and the total amount of money (\$17.17). Have them work independently to solve the problem. Then the students can move into pairs and compare their answers (there will be \$2.48 left). Invite students to share how they worked with hundredths to answer the question. Ask, **How did you find the sums and differences?**

Insert a screenshot of your proposed **new** content.

Substitution Request

adding decimal fractions involving money

In this activity, students use a strategy of their choice to solve a problem involving dollars and cents.

preparation

Each student will need:

- 1 copy of Problem Solving 2

activity

Distribute a copy of the support page to each student. Read the problem together with the class to ensure understanding. Ask, [What information would help you answer the question?](#) Encourage students to describe that they need to find the total each person spent (Asila \$14.69, and Gerardo \$13.69) and the difference between the amounts (\$1). Have them work independently to solve the problem. Then the students can move into pairs and compare their answers. Invite students to share how they worked with hundredths to answer the question. Ask, [How did you find the sums?](#)

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2.E.iv Narrative	Teacher Notes 11.5, Step 2 https://www.origoslate.com/tx/slaunch?c=1&t=page&i=21378	SS TX Teacher Notes 8.4, Step 2 https://www.origoslate.com/tx/slaunch?c=2&t=page&i=21378
Publisher's rationale for the change		
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Publisher's description of the change		
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Substitution Request

step 2 starting the lesson

Project the place-value chart shown above and use the base-10 blocks to visually show how each block is related to the ones block. Remind the students about the 'times 10' and 'divided by 10' relationship of the place-value system. Highlight how the ones place is the center of the chart. Everything to the left is built up from the ones place by a factor of 10 and everything to the right is broken down from the ones place by a factor of 10. Emphasize that it is important to visualize what 'one whole' is so that the other place values can be related to the whole.

Insert a screenshot of your proposed **new** content.

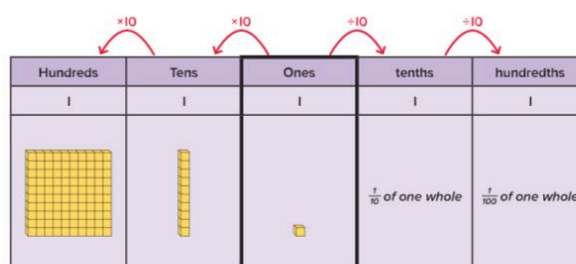
step 1 preparing the lesson

You will need:

- base-10 blocks (hundreds, tens, and ones)
- decimal numeral expander from *The Number Case*
- non-permanent marker

Each student will need:

- color pencil or crayon
- Student Journal 8.4



step 2 starting the lesson

Project the place-value chart shown above and use the base-10 blocks to visually show how each block is related to the ones block. Remind the students about the "times 10" and "divided by 10" relationship of the place-value system. Highlight how the ones place is the center of the chart. Everything to the left is built up from the ones place by a factor of 10 and everything to the right is broken down from the ones place by a factor of 10. Emphasize that it is important to visualize what "one whole" is so that the other place values can be related to the whole.

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Substitution Request

2.E.iv Activity	Teacher Notes 11.4, Differentiation https://www.origoslate.com/tx/slaunch?c=1&t=page&i=21375	SS TX Teacher Notes 8.3, Differentiation https://www.origoslate.com/tx/slaunch?c=2&t=page&i=21375
Publisher's rationale for the change		
Page moved to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
No change to content. Change to the placement of the content only.		

Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)

extra help

preparation

Each group of students will need:

mix-and match cards showing common fractions, decimal fractions, and fraction area models and number line models for tenths from The Number Case

activity

Have the students mix and match the cards. As they gain confidence they use the cards to play mix-and-match games.

extra practice

preparation

Each group of students will need:

2 standard number cubes in 2 different colors

1 copy of Support 13

activity

Tell the students that the (blue) number cubes show tenths and (red) number cubes show hundredths. Have the students take turns to roll the cubes and shade parts of the first square to match the fraction rolled. The student who rolls the greatest fraction scores one point. The student with the most points after six rounds is the winner.

Insert a screenshot of your proposed **new** content.

Substitution Request

extra help

preparation

Each group of students will need:

- mix-and-match cards showing common fractions, decimal fractions, and fraction area models and number line models for tenths from *The Number Case*

activity

Have the students mix and match the cards. As they gain confidence they use the cards to play mix-and-match games.

extra practice

preparation

Each group of students will need:

- 2 cubes labeled: (from Extra Practice 8.2)
Cube A: 0, 1, 2, 3, 4, 5
Cube B: 4, 5, 6, 7, 8, 9

Each student will need:

- 1 copy of Support 36

activity

Tell the students that the (blue) number cubes show tenths and (red) number cubes show hundredths. Have the students take turns to roll the cubes and shade parts of the first square to match the fraction rolled. The student who rolls the greatest fraction scores one point. The student with the most points after six rounds is the winner.

SE Breakout(s) and Citation Type(s)	Description of the specific location and hyperlink to the exact location of adopted content	Description of the specific location and hyperlink to the exact location of the proposed new content
Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
2.E.v Narrative/Activity	Page 254 & 255, Student Journal 11.4, Discussion & Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=254 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=255	Page 180 & 181, SS TX Student Journal 8.3, Step In & Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=180 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=181

Substitution Request

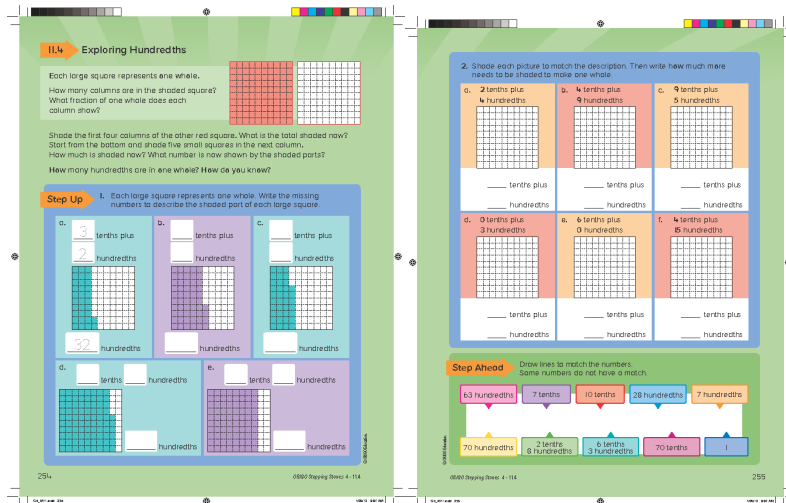
Publisher's rationale for the change

Page moved to improve content coherence and content alignment to TEKS.

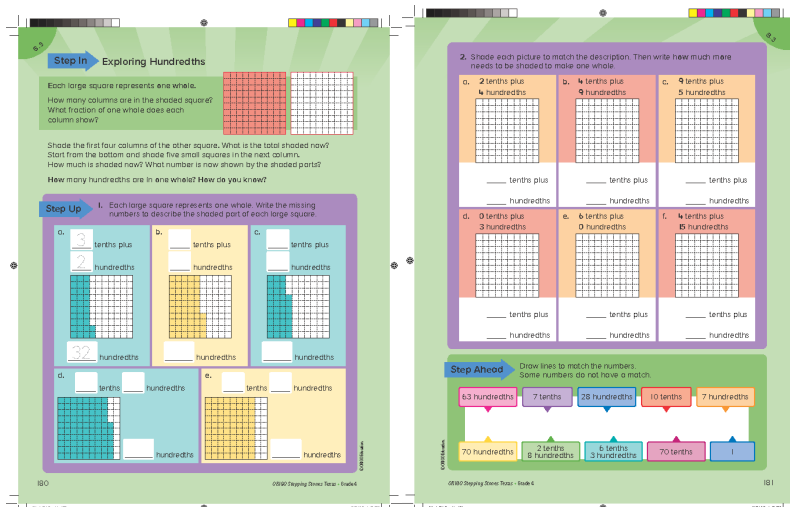
Publisher's description of the change

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SE
Breakout(s)
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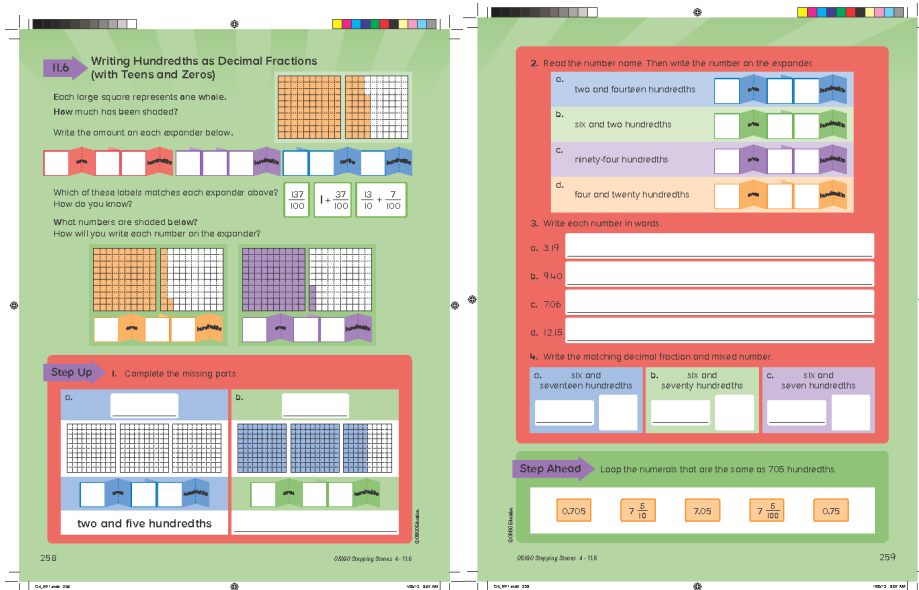
Description of the specific location and
hyperlink to the exact location of adopted
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Description of the specific location and
hyperlink to the exact location of the
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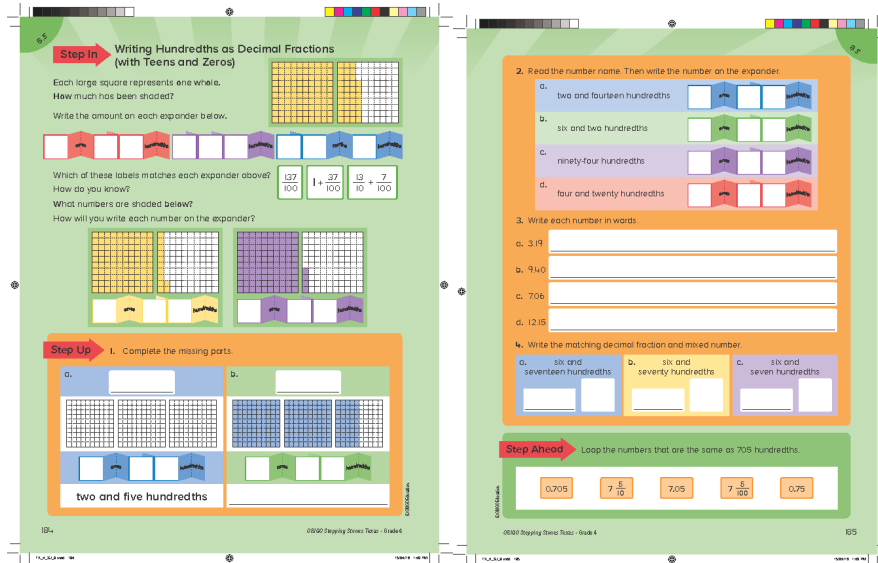
Citation Type(s)		
Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
2.E.v Narrative/Activity	Page 258 & 259, Student Journal 11.6, Discussion & Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=258 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=259	Page 184 & 185, SS TX Student Journal 8.5, Step In & Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=184 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=185
Publisher's rationale for the change		
Page moved to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
No change to content. Change to the placement of the content only.		

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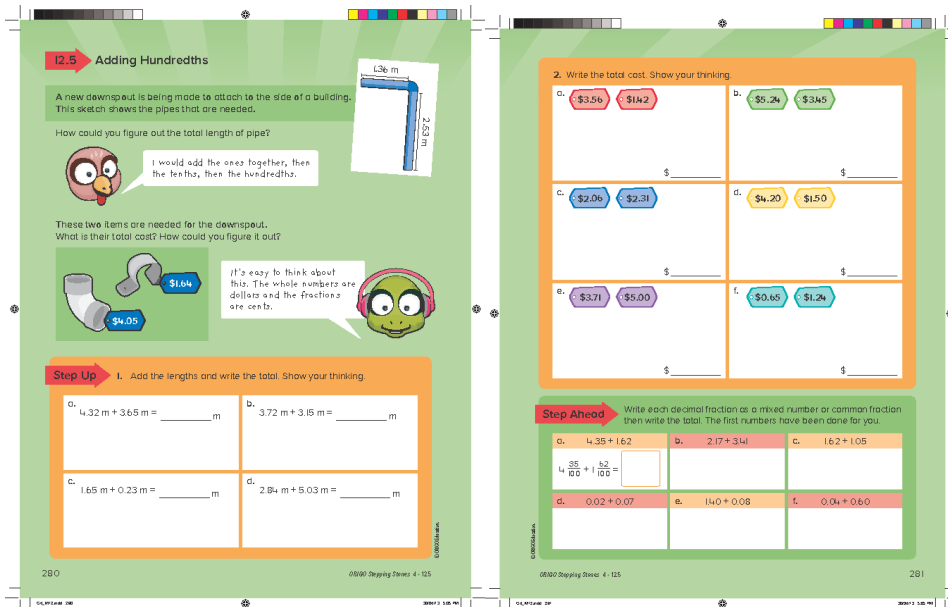
Substitution Request



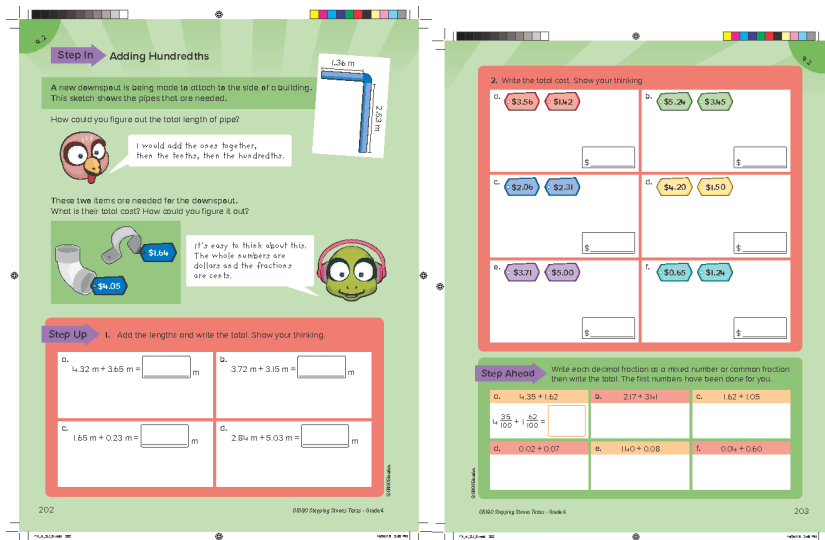
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2.E.vi Narrative/Activity	Page 280 & 281, Student Journal 12.5, Discussion & Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=280 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=281	Page 202 & 203, SS TX Student Journal 9.2, Step In & Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=202 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=203
Publisher's rationale for the change		
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Publisher's description of the change		
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2.F.i/2.F.ii/2.F.iii /2.F.iv Narrative	Teacher Notes 11.7, Step 3 https://www.origoslate.com/tx/slaunch?c=1&t=page&i=21386	SS TX Student Journal 8.8, Step 3 https://www.origoslate.com/tx/slaunch?c=2&t=page&i=21451
Publisher's rationale for the change		

Substitution Request

Page removed to improve content coherence and content alignment to TEKS.

Publisher's description of the change

Lesson added to provide additional grade level TEKS coverage. More specifically, greater emphasis is placed on alternate models (e.g., area, number line, common fractions) to make comparisons. Decimal fractions also include tenths and hundredths.

Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)

Substitution Request

step 3 teaching the lesson

Display a meter stick and say, **We are going to call the length of a meter 'one whole'. What is one tenth of a meter?** (One decimeter.) **What is one hundredth of a meter?** (One centimeter.) Use the meter stick to demonstrate the length of one decimeter and one centimeter. Project the length 2.17 m on the board and ask, **What does the label 'm' tell us?** Bring out that the label 'm' tells that 'one whole' is one meter. Ask, **What does the decimal point tell us?** (The decimal point tells where the ones place is located in the number.) **What does each digit in the measure tell us?** (The digit 2 tells that there are 2 whole meters. The digit 1 tells that there is 1 decimeter, which is one-tenth of a meter. The digit 7 tells that there are 7 centimeters. A centimeter is one-hundredth of a meter.) Lay three meter sticks end-to-end and show how 2.17 m is 2 meters, 1 decimeter, and 7 centimeters. Then demonstrate how that is the same length as 2 meters and 17 centimeters.

Identify a safe zone for students to measure the longest standing jump they can make. Have six volunteers make jumps while other students record their lengths to the nearest hundredth of a meter. Have the students write the length of their jump on an index card. Encourage students to describe each length in meters, decimeters, and centimeters and then in a combination of meters and centimeters.

Refer to the number line on the board and invite one student to show their card to the class. Ask, **At which point on the number line will we mark this distance?** Invite individuals to explain how they will use the digits to help figure out where the card should be positioned. Attach the card to the board and draw a line to join it to the appropriate point on the number line.

Invite a second student to show their card. Ask, **At which point on the number line will we mark this distance? Which distance is longer? How do you know?** Have the students describe what the digits indicate and compare this distance to the first jump. Repeat for the other cards. When the students are confident, write pairs of numbers on the board and invite volunteers to write $<$ or $>$ to describe the relationship between them, for example $2.28 > 2.19$. Say, **2 meters, 2 decimeters, and 8 centimeters is longer than 2 meters, 1 decimeter, and 9 centimeters.**

Project the Step In discussion from Student Journal 11.7 and work through the questions with the whole class. Have students describe what each of the digits in the table indicates. For example, Anna threw an object 2 meters, 2 decimeters, and 1 centimeter or 2 meters and 21 centimeters. Have a student show each length on four meter sticks that are laid end-to-end. Ask, **What does the 0 in Sumi's measurement mean?** (There were no additional centimeters beyond 1 decimeter.) Read the Step Up and Step Ahead instructions with the students. Make sure they know what to do and then have them work independently to complete the task.

Insert a screenshot of your proposed **new** content.

Substitution Request

step 3 teaching the lesson

- Project the numbers **3.32**, **2.32**, **2.23**, **3.22**, **2.3**, and **3.2** on the board. Refer to 3.32 and ask, **How do we say this number?** (Three and thirty-two hundredths.) **What does each digit in the number tell us?** Encourage students to describe that there are 3 groups of one, 3 groups of one-tenth, and 2 groups of one-hundredth in the number. Project the place-value chart that shows these groups. Remind the students that the decimal point is used to tell where the ones place is in the number.
- Project the area model that represents 3.32 and invite volunteers to describe how each of the digits is represented in the picture. Project the number line model that represents 3.32 and invite different volunteers to describe how each of the digits is represented in the model.
- Ask, **How can we write 3.32 as a mixed number?** Invite a volunteer to write $3\frac{32}{100}$ on the board. Project the addition sentences $3 + \frac{3}{10} + \frac{2}{100}$ and $3 + \frac{32}{100}$. Invite volunteers to describe how these different number sentences represent $3\frac{32}{100}$.
- Organize the students into five small groups and distribute the support page and scissors to each group. Assign one of the remaining numbers on the board (2.32, 2.23, 3.22, 2.3, or 3.2) to each group and direct them to work together to complete the support page for their number. Afterward, have them cut the support page into strips along the dotted lines.
- When all the groups have finished, collect the strips that show the area models from each group. (*Note:* Include the strip for 3.32.) Ask, **How can we use the area models to help us organize the numbers from least to greatest?** Encourage students to describe that they would look to see which number showed the most area shaded. They would first compare whole amounts, then look at the tenths, and finally the hundredths to make the comparisons. Once students have organized the strips from least to greatest, tape or paste them on one of the sheets of construction paper in order from least to greatest.
- Repeat the discussion for each of the other models starting with the number line. For this representation, the distance from zero represents the greater decimal fraction. Create the ordering wall charts and display them as a reference for the students.
- Project the Step In discussion from Student Journal 8.8 and work through the questions with the whole class. Read the Step Up and Step Ahead instructions with the students. Remind students of the symbols $<$ and $>$ and how they show inequality. Encourage students to use the posters as a reference to help them compare and order the decimal fractions. Make sure they know what to do and then have them work independently to complete the task.

SE Breakout (s) and Citation Type(s)	Description of the specific location and hyperlink to the exact location of adopted content	Description of the specific location and hyperlink to the exact location of the proposed new content
Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
2.F.ii Activity	Page 260 & 261, Student Journal 11.7, Discussion https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=260	Page 190 & 191, SS TX Student Journal 8.8, Step In

Substitution Request

<https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=261>

<https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=190>

<https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=191>

Publisher's rationale for the change

Page removed to improve content coherence and content alignment to TEKS.

Publisher's description of the change

Lesson added to provide additional grade level TEKS coverage. More specifically, greater emphasis is placed on alternate models (e.g., area, number line, common fractions) to make comparisons. Decimal fractions also include tenths and hundredths.

Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)

11.7 Comparing and Ordering Hundredths

Six students had a throwing competition using a ball made of crumpled paper. They measured the distance of their throws in meters and fractions of a meter. This table shows the results.

Student	Anno	Cole	Peto	Franco	Sumi	Amos
Distance (m)	2.21	$\frac{1}{4}$	$\frac{3}{4}$	1.22	$\frac{1}{10}$	3.9

Mark the length of Peto's throw on this number line. How did you figure it out?

Was Sumi's throw longer or shorter than Peto's? How did you figure it out?

Step Up Five students had a throwing competition. They played three rounds. Use the data to help you answer the questions on page 261.

Student	Bloke	Lela	Kayla	Carter	Luis
Round 1 (m)	3.45	$\frac{1}{10}$	3.38	3.21	$\frac{1}{10}$
Round 2 (m)	3.87	$\frac{1}{10}$	3.50	3.86	$\frac{1}{10}$
Round 3 (m)	3.88	$\frac{1}{10}$	3.42	2.97	$\frac{1}{10}$

1. Write the greatest distance that each student threw.

Student	Bloke	Lela	Kayla	Carter	Luis
Round 1	m	m	m	m	m
Round 2	m	m	m	m	m
Round 3	m	m	m	m	m

2. Write the distance of these students' throws for Round 2 and Round 3. Then write < or > to make each statement true.

Student	Round 2	Round 3
Bloke	m	m
Lela	m	m
Kayla	m	m
Carter	m	m
Luis	m	m

3. Write the names of the students from shortest throw to longest throw for each round. Write the distance below each name.

Round	Student	Distance (m)
Round 1		
Round 2		
Round 3		

Step Ahead a. Use 0, 1, and 2 to write four different decimal fractions. Use each digit once in each number.

b. Loop the least number in blue. c. Loop the greatest number in red.

Insert a screenshot of your proposed **new** content.

Substitution Request

Step In Comparing and Ordering Decimal Fractions

Look at these six decimal fractions. Which number is greater, C or F? How could you figure it out?

A	B	C	D	E	F
$3\frac{1}{4}$	3.38	2.6	3.8	3.04	$2\frac{1}{3}$

Neah thought it would be easier to compare the numbers if they had the same denominator. How should he change the numbers? Do you need to change only one number or both numbers?

I would think about where the numbers would be on a number line.

Between which two whole numbers are the numbers C and F? How could you show the locations of the numbers on this number line?

I would think about the place value of each number.

Write each number in these place-value charts. How do the charts help you figure out the greater number?

Step Up 1. Write $<$, $>$, or $=$ to make each sentence true. Use what you know about equivalence to help you.

a. $\frac{5}{10}$ $\frac{8}{100}$	b. $\frac{7}{10}$ $\frac{70}{100}$	c. $\frac{25}{100}$ $\frac{1}{10}$	d. $\frac{275}{100}$ $\frac{275}{10}$
e. $\frac{75}{100}$ $\frac{7}{10}$	f. $\frac{1}{10}$ $\frac{1}{100}$	g. $\frac{3}{10}$ $\frac{30}{100}$	h. $\frac{2}{100}$ $\frac{2}{10}$

Step Ahead Write these numbers in order from greatest to least.

0.2	0.58	0.6	$1\frac{1}{4}$	1.07	2.00	0.09
greatest						least

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Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
2.F.i Activity	Teacher Notes 11.7, Differentiation https://www.origoslate.com/tx/slaunch?c=1&t=page&i=21387	SS TX Teacher Notes 8.8, Differentiation https://www.origoslate.com/tx/slaunch?c=2&t=page&i=21452
Publisher's rationale for the change		
Page removed to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
The extra help activity has been adjusted to place greater emphasis on the number line model. An extra challenge activity has also been provided for high achieving students.		

Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)

extra help

preparation

Each student will need:

hundredths numeral expander from The Number Case

non-permanent marker

activity

Have each student write a number on their open expander. Students then compare their numbers and the digits written in each place. They order their numbers from least to greatest then greatest to least. Repeat several times. As students gain confidence have them write digits on a closed expander.

extra practice

preparation

None required.

activity

Have pairs of students play the online game "Top Score".

Insert a screenshot of your proposed **new** content.

extra help

preparation

Each small group of student will need:

- 2 cubes labeled:
Cube A: 0, 1, 2, 3, 4, 5
Cube B: 4, 5, 6, 7, 8, 9
- 1 copy of Extra Help 8.8

activity

In turn, students roll the two cubes. They use the numbers that they roll to compose a decimal fraction in the form 0.____. They then locate the number that they roll on the number line. The distance between each decimal fraction and zero is then compared with one point being awarded to the student who records the greatest decimal fraction. The winner is the first player to score five points. (*Note: Convert the tenths that are recorded below the number line into hundredths for some students if needed.*)

extra practice

preparation

None required.

activity

Have pairs of students play the online game "Top Score."

extra challenge

preparation

None required.

activity

Have students play "Guess my Number." One student secretly writes a decimal fraction that all students know is between zero and three. The other students take turns to guess the decimal fraction with the student who wrote the decimal saying whether it is "greater than" or "less than" each guess. The winner is the student who guesses correctly. The students alternate roles and repeat the game.

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2.G.i/2.G.ii Narrative/Activity	Page 276 & 277, Student Journal 12.3, Discussion & Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=276 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=277	Page 176 & 177, SS TX Student Journal 8.1, Step In & Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=176 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=177

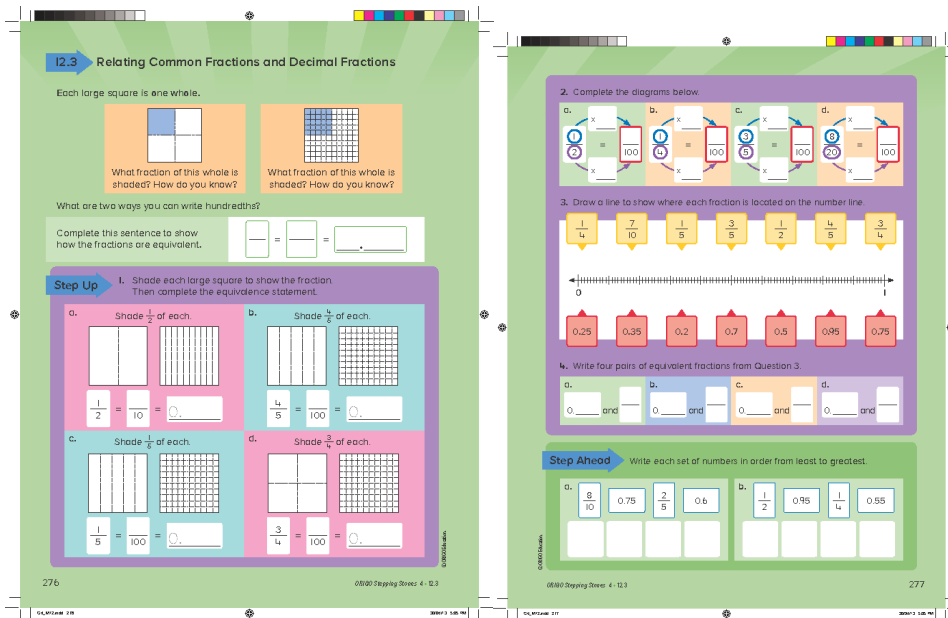
Publisher's rationale for the change

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Publisher's description of the change

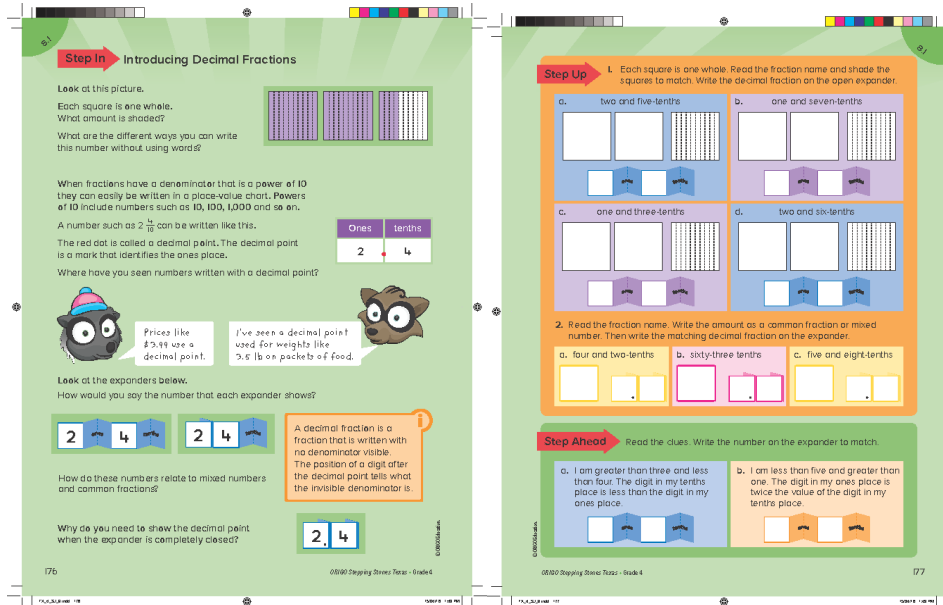
Lesson added to provide additional grade level TEKS coverage. More specifically, the relationship between common fractions with a denominator of 10 and 100 and decimal fractions are emphasized.

Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)



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2.G.i Narrative	Teacher Notes 12.3, Step 3 https://www.origoslate.com/tx/slaunch?c=1&t=page&i=21455	SS TX Teacher Notes 8.1, Step 3 https://www.origoslate.com/tx/slaunch?c=2&t=page&i=21366
Publisher's rationale for the change		
Page removed to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
Lesson added to provide additional grade level TEKS coverage. More specifically, the relationship between common fractions with a denominator of 10 and 100 and decimal fractions are emphasized. Lesson notes are also expanded and much more comprehensive.		

Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)

Substitution Request

step 3 teaching the lesson

Organize students into seven small groups and distribute the support page and scissors. Direct them to cut out the six squares on the sheet. As they are cutting, project the fractions twenty hundredths, twenty-five hundredths, forty hundredths, fifty hundredths, sixty hundredths, seventy-five hundredths, and eighty hundredths on the board. Assign one fraction to each group and have them show the fraction using different representations on different grids.

Have each group show the different ways they shaded the squares to represent their fraction. Refer to the fraction names on the board and ask, *How can we write these amounts as a common fraction? What other fractions can we write for the same number of hundredths?* Encourage the students to write both the common and decimal fraction forms for hundredths (and tenths if possible), for example $\frac{25}{100}$ or 0.25, and then use their area models to show at least one other way to write the same fraction, for example twenty-five hundredths could be expressed as $\frac{1}{4}$ as shown below left. Highlight how the shaded squares can be moved to fill in the one-fourth region.

Have students write the related fractions they found on the board and justify how they all represent the same amount. Include the fractions shown to the right.

Project the Step In discussion from Student Journal 12.3 and work through the questions with the whole class. Read the Step Up and Step Ahead instructions with the students. Make sure they know what to do and then have them work independently to complete the task. (Note : Some students may need support as they locate $\frac{1}{4}$ and $\frac{3}{4}$ on the number line that has been partitioned into hundredths.)

Insert a screenshot of your proposed **new** content.

Substitution Request

step 3 teaching the lesson

- Display a base-10 ones block and say, *This block is "one whole". What would 10 times as much look like?* (A base-10 tens block.) Display a tens block and demonstrate how it visually shows 10 times as much. Ask, *What would 100 times "one whole" look like?* (A base-10 hundreds block.) Display a hundreds block and demonstrate how it visually shows 100 times as much. Open the *Flare Place Value* teaching tool and move blocks across the table to reinforce the relationships.
- Display the base-10 hundreds block and ask, *If this was "one whole," what would one-tenth look like?* (A base-10 tens block.) Display a tens block and demonstrate how it visually shows one-tenth of the hundreds block. Display tens block and ask, *If this was "one whole," what would one-tenth look like?* (A base-10 ones block.) Display a ones block and demonstrate how it visually shows one-tenth of the tens block. Display the base-10 ones block and ask, *This is "one whole" so what do you think one-tenth would look like?* Encourage suggestions and then using the *Flare Place Value* teaching tool move a ones block to the tenths column to show the representation of one-tenth. Say, *There is no one-tenth block but if there was it would look like this.* Project the next chart to emphasize that the ones place establishes the whole and that the place values to the left of the ones place build up from the whole by a factor of ten and the place values to the right of the ones place break down from the whole by a factor of ten. Highlight the "times 10" and "divided by 10" nature of the place values.
- Project the area model of 2.5 and explain that each square represents "one whole." Ask, *What does one-tenth look like?* (One-tenth of the area of the square.) *What amount is shaded?* Bring out the fact that there are 2 wholes and 5 one-tenths shaded. Ask, *How would we write that amount using a mixed number?* Invite a volunteer to write $2\frac{5}{10}$ on the board. Ask, *What does the digit 2 tell us?* (There are 2 groups of one.) *What does the fraction tell us?* (There are 5 groups of one-tenth.)
- *How would we record that same information on the place value chart?* Remind students that when a number is written, each digit tells us two pieces of information. It tells the number of groups and its position tells the number in each group. Record the digits 2 and 5 in the appropriate locations on the place-value chart.
- Display the decimal numeral expander and say, *This is a numeral expander used for writing numbers that have amounts smaller than one whole.* Demonstrate how to record 2 groups of one and 5 groups of one-tenth on the expander. Make sure the words are shown initially and then hide them. Display both the decimal and whole number expanders and say, *One of these expanders shows the number 2 and 5 tenths. The other expander shows the number 25. How do we know which one is which?* Encourage students to suggest how the expanders could be identified. If needed, introduce the concept of using a decimal point. Explain that the purpose of the decimal point is to tell the position of the ones place, and if there are amounts less than one whole, a decimal point is used. Further explain that if there is no decimal point used, it can be assumed that the ones place is the right-most digit. Use the marker to draw the decimal point as shown on page 176 of Student Journal 8.1. (Note: When the decimal numeral expander is open, the decimal point needs to be removed, and, when the words are hidden, the decimal point needs to be shown. Avoid describing the purpose of a decimal point as separating whole numbers from decimal numbers. This description can lead to misconceptions. Instead, focus on that fact that it indicates the location of the ones place (one whole or the unit). This distinction is important so that students understand the place-value system as starting with the unit (one whole) as the base and building up by a factor of 10 and breaking down by a factor of 10.)
- Project $2\frac{5}{10} = 2.5$ on the board and explain that when fractions have denominators of 10, 100, 1,000, and so on, they can easily be written as a decimal fraction because of the way the place-value system works. Highlight that whether the number is written as a mixed number or as a decimal fraction, one can still determine that there are 2 groups of one and 5 groups of one-tenth.
- Project the Step In discussion from Student Journal 8.1 and work through the questions with the whole class. Explain that "powers of 10" are those numbers that have a "times 10" relationship to the number 1 such as 10, 100, 1,000, and so on. Read the Step Up and Step Ahead instructions with the students. Make sure they know what to do and then have them work independently to complete the task.

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Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
2.G.ii Activity	Grade 4, Module 11, Assessment, Summative, Check Up 1 https://www.origoslate.com/tx/slaunch?c=1&t=resource&i=36881	SS TX Grade 4, Module 8, Assessment, Summative, Check Up 1 https://www.origoslate.com/tx/slaunch?c=2&t=resource&i=71277
Publisher's rationale for the change		
Page moved to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
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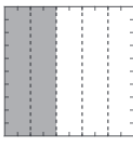
Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)

Substitution Request

Check Up

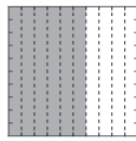
1. Each large square is one whole. Read what fraction is shaded. Then draw lines to help you write an equivalent fraction.

a.



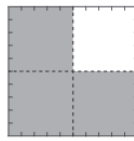
$$\frac{2}{5} = \frac{\quad}{10}$$

b.



$$\frac{6}{10} = \frac{\quad}{100}$$

c.



$$\frac{3}{4} = \frac{\quad}{100}$$

2. Complete the missing parts.

a.

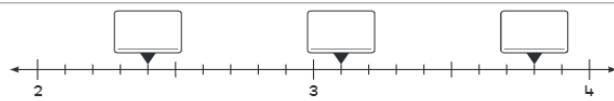


b.



three and forty-three hundredths

3. On this number line, the distance from 2 to 3 is one whole. Write the decimal fraction shown by each arrow.



4. Loop the greater number in each pair.

a.

5.4 or 6.1

b.

3.0 or 2.9

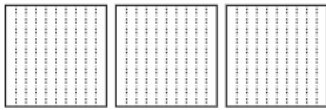
Insert a screenshot of your proposed **new** content.

Substitution Request

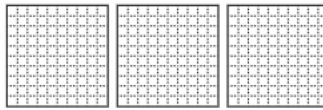
Check-Up

I. Each square is one whole. Read the fraction name and shade the squares to match.

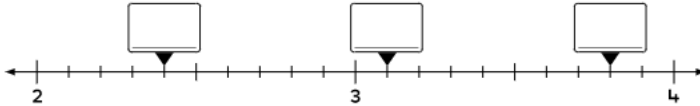
a. two and three tenths



b. two and forty hundredths



2. On this number line, the distance from 2 to 3 is one whole. Write the decimal fraction shown by each arrow.



3. Write $<$ or $>$ to make the sentence true.

a. 5.4 6.1

b. 3.0 2.95

4. Color the ☐ beside the set of numbers ordered from **least** to **greatest**.

☐ 2.4 1.34 1.4 ☐ 1.9 2.01 2.11 ☐ 1.7 1.68 2.01

5. Write the matching common fraction for each decimal fraction.

a. 0.8 =

b. 0.50 =

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2.H, 3.G.ii Narrative/Activity	Page 272 & 273, Student Journal 12.1, Discussion & Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=272 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=273	Page 188 & 189, SS TX Student Journal 8.7, Step In & Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=188 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=189
Publisher's rationale for the change		

Substitution Request

Page moved and adjusted to improve content coherence and content alignment to TEKS.

Publisher's description of the change

Step Ahead content adjusted to reflect more current records.

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12.1 Locating Decimal Fractions on a Number Line

The distance between each whole number on these number lines is one whole. What number is the orange arrow pointing to? What helped you figure it out?

What other decimal fraction describes that position? How do you know? Look where the red arrow is pointing. Which two decimal fractions describe that position?

What number do you think the green arrow is pointing to? How could you figure it out?

Step Up The distance between each whole number is one whole. Write the decimal fraction that is shown by each arrow. Think carefully before you write.

1. a. b. c. d.

2. a. b. c. d.

Step Ahead Some athletes are so fast that the last person in a race may only be one second slower than the first person. Their times are recorded in whole seconds and hundredths of a second.

Draw arrows and write the initials to show the approximate position of each athlete's time on the number line. The first one has been done for you.

1996 Olympic Games Men's 200 Meters			
Athlete	Time (sec)	Athlete	Time (sec)
Michael Johnson	19.32	Jeff Williams	20.17
Frank Fredericks	19.68	Ivan Garcia	20.21
Alto Boldon	19.80	Patrick Stevens	20.27
Obadele Thompson	20.14	Michael Marsh	20.48

Insert a screenshot of your proposed **new** content.

Step In Locating Decimal Fractions on a Number Line

The distance between each whole number on these number lines is one whole. What number is the blue arrow pointing to? What helped you figure it out?

What other decimal fraction describes that position? How do you know? Look where the red arrow is pointing. Which two decimal fractions describe that position?

What number do you think the green arrow is pointing to? How could you figure it out?

Step Up The distance between each whole number is one whole. Write the decimal fraction that is shown by each arrow. Think carefully before you write.

1. a. b. c. d.

2. a. b. c. d.

Step Ahead Race times can be recorded in whole seconds, tenths, and hundredths of a second. Draw arrows and write initials to show the approximate position of each athlete's time. Write above or below the number line. The first one has been done for you.

2002 Olympic Games Men's 200 Meters			
Athlete	Time (s)	Athlete	Time (s)
Usain Bolt	19.32	Churandy Martina	20.00
Yohan Blake	19.44	Christopher Lemaitre	20.19
Warren Weir	19.44	Alex Quiñónez	20.57
Walter Scott	19.80	Anaso Jobodwana	20.49

SE Breakout (s) and Citation Type(s)	Description of the specific location and hyperlink to the exact location of adopted content	Description of the specific location and hyperlink to the exact location of the proposed new content
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Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
2.H Narrative	Teacher Notes 12.1, Step 3 https://www.origoslate.com/tx/slaunch?c=1&t=page&i=21447	SS TX Teacher Notes 8.7, Step 3 https://www.origoslate.com/tx/slaunch?c=2&t=page&i=21447
Publisher's rationale for the change		
Page moved to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
Activity notes adjusted to have students locate the position of decimal fractions on a number line.		

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step 3 teaching the lesson

Project the first number line and say, Sometimes it is helpful to have different lengths of markings on number lines to help us quickly locate different numbers. What do the longest lines show us? (The locations of the whole numbers.) What do the next longest lines show us? (The locations of numbers that are exactly halfway between the whole numbers.) Point to one of the lines that show halves and ask, What number is located at this marking? What do the shortest lines show? (Every tenth of a whole number.) How do you know? (The distance between each whole number has been partitioned into ten equal-sized lengths.) Repeat the discussion for the next number line. Point to various marks and ask students to identify the number that is located at the marking.

Project the Step In discussion from Student Journal 12.1 and work through the questions with the whole class. Read the Step Up and Step Ahead instructions with the students. Encourage students to imagine additional partitions for the hundredths place for Question 2. Make sure they know what to do and then have them work independently to complete the task.

Insert a screenshot of your proposed **new** content.

Substitution Request


step 3 teaching the lesson

- Project the first number line and say, *Sometimes it is helpful to have different lengths of markings on number lines to help us quickly locate different numbers. What do the longest lines show us?* (The locations of the whole numbers.) *What do the next longest lines show us?* (The locations of numbers that are exactly halfway between the whole numbers.) Point to one of the lines that show halves and ask, *What number is located at this marking? What do the shortest lines show?* (Every tenth of a whole number.) *How do you know?* (The distance between each whole number has been partitioned into ten equal-sized lengths.) Repeat the discussion for the next number line. Point to various marks and ask students to identify the number that is located at the marking.
- Project the decimal fractions below the number line. Call on volunteers to locate the position of each decimal fraction on the number line. Reinforce that the position of each decimal fraction shows its distance from zero. This means that the greater decimal fraction is always shown on the right hand side. Take this opportunity to highlight that 1.6 and 1.60 occupy the same position on the number line.
- Project the Step In discussion from Student Journal 8.7 and work through the questions with the whole class. Read the Step Up and Step Ahead instructions with the students. Encourage students to imagine additional partitions for the hundredths place for Question 2. Make sure they know what to do and then have them work independently to complete the task.

SE Breakout(s) and Citation Type(s)	Description of the specific location and hyperlink to the exact location of adopted content	Description of the specific location and hyperlink to the exact location of the proposed new content
Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
2.H Activity	Grade 4, Module 12, Assessment, Summative, Check Up 1 https://www.origoslate.com/tx/slaunch?c=1&t=resource&i=36883	Grade 4, Module 8, Assessment, Summative, Check Up 1 https://www.origoslate.com/tx/slaunch?c=2&t=resource&i=71277
Publisher's rationale for the change		
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Check Up 

1. Write each common fraction as a decimal fraction. Find equivalent common fractions to help you.

a. $\frac{55}{100} = 0.\underline{\hspace{1cm}}$


b. $\frac{4}{5} = 0.\underline{\hspace{1cm}}$

c. $\frac{1}{4} = 0.\underline{\hspace{1cm}}$

2. On this number line, the distance between 0 and 1 is one whole. Draw a line to show where each number is located on the number line.

0.65

0.08



3. Write $<$ or $>$ to make each statement true.

a. 6.30 \bigcirc 6.03

b. 5.4 \bigcirc 5.44

4. Calculate each total. Show your thinking.

a. $0.4 + 0.3 = \underline{\hspace{1cm}}$

b. $0.08 + 0.50 = \underline{\hspace{1cm}}$

c. $0.4 + 0.35 = \underline{\hspace{1cm}}$

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Q1

$\frac{1}{4}$.NF.1 + $\frac{1}{4}$.NF.6

Q2

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

Q3

$\frac{1}{4}$.NF.7

Q4

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

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Substitution Request

Check-Up

1. Each square is one whole. Read the fraction name and shade the squares to match.

a. two and three tenths

b. two and forty hundredths

2. On this number line, the distance from 2 to 3 is one whole. Write the decimal fraction shown by each arrow.

3. Write < or > to make the sentence true.

a. 5.4 6.1

b. 3.0 2.95

4. Color the ☐ beside the set of numbers ordered from least to greatest.

☐ 2.4 1.34 1.4

☐ 1.9 2.01 2.11

☐ 1.7 1.68 2.01

5. Write the matching common fraction for each decimal fraction.

a. 0.8 =

b. 0.50 =

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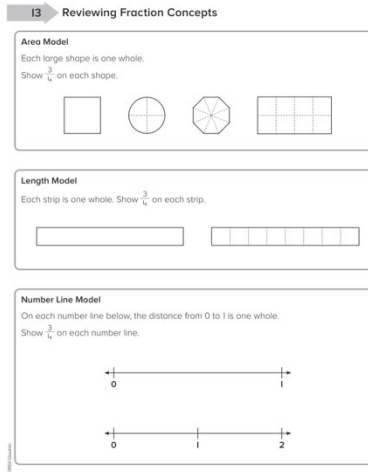
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12-2 4-2(B) 4-2(C)
13-4 4-2(F)
15 4-2(G)

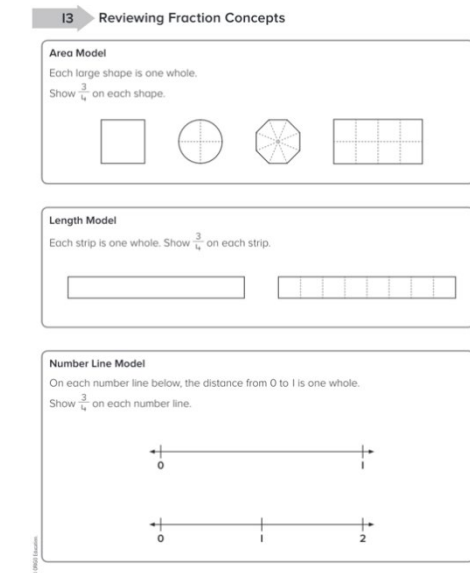
SE Breakout(s) and Citation Type(s)	Description of the specific location and hyperlink to the exact location of adopted content	Description of the specific location and hyperlink to the exact location of the proposed new content
Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
3.A Activity	Teacher Notes 3.9, Resources, Staticware https://www.origoslate.com/tx/slaunch?c=1&t=resource&i=36935	SS TX Teacher Notes 3.8, Resources, Staticware https://www.origoslate.com/tx/slaunch?c=2&t=resource&i=65560
Publisher's rationale for the change		
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Publisher's description of the change		
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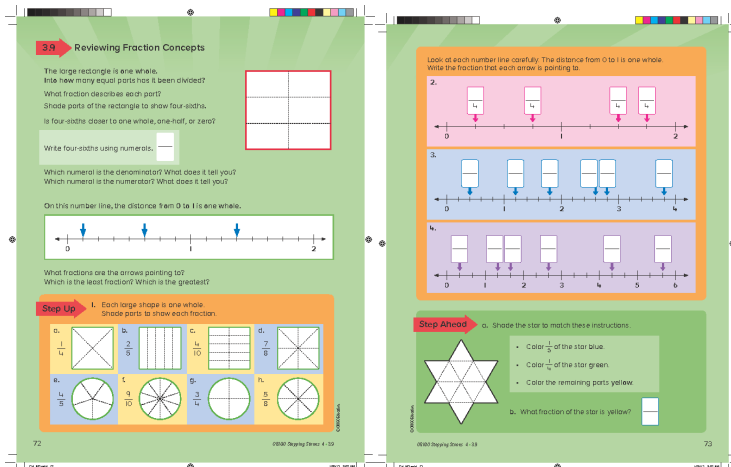


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Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
3.A, 3.G.i Narrative	Page 72 & 73, Student Journal 3.9, Discussion https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=72 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=73	Page 70 & 71, SS TX Student Journal 3.8, Step In https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=70 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=71

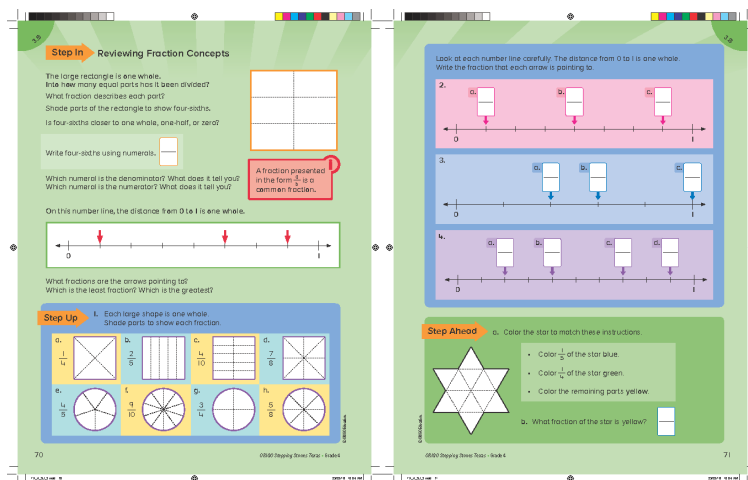
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Publisher's description of the change		
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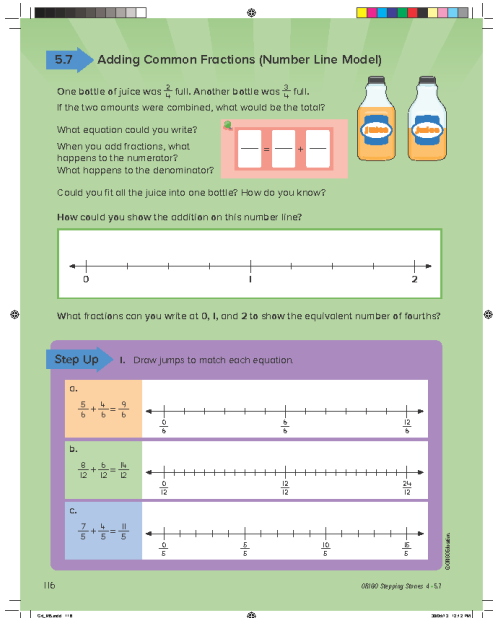


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Citation Type(s)		
Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
3.A Activity	Page 116, Student Journal 5.7, Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=116	Page 116 & 117, SS TX Student Journal 5.7, Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=116 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=117
Publisher's rationale for the change		
Page adjusted to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
Step Ahead adjusted to reinforce decomposing whole numbers into common fractions with like denominators.		

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Substitution Request

The image shows two pages from a math textbook. Page 116 (left) is titled 'Step In Adding Common Fractions (Number Line Model)'. It contains a word problem about two bottles of juice, a diagram of two bottles, and a number line from 0 to 2. Below this, there are three problems (a, b, c) involving adding fractions and drawing jumps on a number line. Page 117 (right) is titled 'Step Ahead'. It contains a word problem about Leonardo swimming, a diagram of a swimmer, and a number line from 0 to 1. Below this, there are three problems (a, b, c) involving adding fractions and writing the totals.

SE Breakout(s) and Citation Type(s)	Description of the specific location and hyperlink to the exact location of adopted content	Description of the specific location and hyperlink to the exact location of the proposed new content
Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
3.C Narrative/Activity	Page 74 & 75, Student Journal 3.10, Discussion & Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=74 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=75	Page 76 & 77, SS TX Student Journal 3.11, Step In & Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=76 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=77
Publisher's rationale for the change		
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Substitution Request

3.10 Reviewing Equivalent Fractions

Look at this fraction chart. The top strip is one whole.

Point to the strip that is divided into two parts. What fraction of that strip is shaded? What parts of other strips can you shade to show the same fraction? How do you know? Write the fractions to complete this sentence.

is the same as is the same as is the same as . These fractions are equivalent.

What do you notice about fractions such as $\frac{1}{2}$, $\frac{3}{6}$, and $\frac{4}{8}$? What fractions do you think are equivalent to 3?

Whole numbers (like 1, 2, and 3) can be written as fractions in many ways. One way is with a denominator of 1.

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

Step Up 1. Use the fraction chart above to help you write equivalent fractions.

a. $\frac{1}{5} = \frac{\quad}{\quad}$ b. $\frac{1}{4} = \frac{\quad}{\quad}$ c. $\frac{8}{10} = \frac{\quad}{\quad}$ d. $\frac{3}{5} = \frac{\quad}{\quad}$ e. $\frac{3}{4} = \frac{\quad}{\quad}$ f. $\frac{4}{10} = \frac{\quad}{\quad}$

On each number line below, the distance from 0 to 1 is one whole.

2. Write the fractions that the arrows are pointing to.

3. Use this number line to help you write equivalent fractions.

Step Ahead Draw lines to divide the last strip into sixteenths. Then complete two different equivalence statements involving sixteenths.

a. $\frac{1}{16} = \frac{\quad}{\quad}$ b. $\frac{1}{8} = \frac{\quad}{\quad}$ c. $\frac{1}{4} = \frac{\quad}{\quad}$ d. $\frac{1}{2} = \frac{\quad}{\quad}$

e. $\frac{1}{8} = \frac{\quad}{\quad}$ f. $\frac{1}{4} = \frac{\quad}{\quad}$ g. $\frac{3}{8} = \frac{\quad}{\quad}$ h. $\frac{1}{2} = \frac{\quad}{\quad}$

Insert a screenshot of your proposed new content.

Step In Reviewing Equivalent Fractions

Look at this fraction chart. The top strip is one whole.

Point to the strip that is divided into two parts. What fraction of that strip is shaded? What parts of other strips can you shade to show the same fraction? How do you know? Write the fractions to complete this sentence.

is the same as is the same as is the same as . These fractions are equivalent.

What do you notice about fractions such as $\frac{1}{2}$, $\frac{3}{6}$, and $\frac{4}{8}$? What fractions do you think are equivalent to 3?

Whole numbers (like 1, 2, and 3) can be written as fractions in many ways. One way is with a denominator of 1.

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

Step Up 1. Use the fraction chart above to help you write equivalent fractions.

a. $\frac{1}{5} = \frac{\quad}{\quad}$ b. $\frac{1}{4} = \frac{\quad}{\quad}$ c. $\frac{8}{10} = \frac{\quad}{\quad}$ d. $\frac{3}{5} = \frac{\quad}{\quad}$ e. $\frac{3}{4} = \frac{\quad}{\quad}$ f. $\frac{4}{10} = \frac{\quad}{\quad}$

On each number line below, the distance from 0 to 1 is one whole.

2. Write the fractions that the arrows are pointing to.

3. Use this number line to help you write equivalent fractions.

Step Ahead Draw lines to divide the last strip into sixteenths. Then complete two different equivalence statements involving sixteenths.

a. $\frac{1}{16} = \frac{\quad}{\quad}$ b. $\frac{1}{8} = \frac{\quad}{\quad}$ c. $\frac{1}{4} = \frac{\quad}{\quad}$ d. $\frac{1}{2} = \frac{\quad}{\quad}$

e. $\frac{1}{8} = \frac{\quad}{\quad}$ f. $\frac{1}{4} = \frac{\quad}{\quad}$ g. $\frac{3}{8} = \frac{\quad}{\quad}$ h. $\frac{1}{2} = \frac{\quad}{\quad}$

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Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
3.C Narrative	Teacher Notes 3.10, Step 3 https://www.origoslate.com/tx/slaunch?c=1&t=page&i=20803	SS TX Teacher Notes 3.11, Step 3 https://www.origoslate.com/tx/slaunch?c=2&t=page&i=20803
Publisher's rationale for the change		

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step 3 teaching the lesson

Display the fraction wall chart from The Number Case and ask, *Which strip has been divided into two equal parts? What fraction of that strip could we shade? (One-half.) What parts of other strips could we shade to show the same fraction? How do you know?* Invite individuals to identify the other strips and the matching fractions. Using their own fraction chart, have the students align a ruler vertically at one-half to check or find fractions that are equivalent. Project the sentence and record the equivalence of the fractions on the board.

Project $\frac{3}{4}$ is the same as ____ on the board. Refer to the fraction wall chart and ask, *What fractions on the fraction chart are equivalent to three-fourths? How do you know?* Have the students position their rulers to find the fraction and complete the expression.

Project the Step In discussion from Student Journal 3.10 and work through the questions with the whole class. Use the fraction chart to establish that fractions such as $\frac{4}{4}$ represent one whole because the denominator tells how many parts are needed to fill the whole and the numerator tells how many parts are already filled in. Also emphasize that whole numbers such as 3 can be written as a fraction with 1 as a denominator. It takes 1 part to fill the whole and 3 parts are filled in making the number greater than 1. Read the Step Up and Step Ahead instructions with the students. Make sure they know what to do and then have them work independently to complete the task.

Insert a screenshot of your proposed **new** content.

step 3 teaching the lesson

- Display the fraction wall chart from *The Number Case* and ask, **Which strip has been divided into two equal parts? What fraction of that strip could we shade?** (One-half.) **What parts of other strips could we shade to show the same fraction? How do you know?** Invite individuals to identify the other strips and the matching fractions. Using their own fraction chart, have the students align a ruler vertically at one-half to check or find fractions that are equivalent. (*Note:* Students use the ruler as a straight edge only and not to measure.) Project the sentence and record the equivalence of the fractions on the board.
- Project $\frac{3}{4}$ **is the same as** ____ then refer to the fraction wall chart and ask, **What fractions on the fraction chart are equivalent to three-fourths? How do you know?** Have the students position their rulers to find the fraction and complete the sentence.
- Project the Step In discussion from Student Journal 3.11 and work through the questions with the whole class. Use the fraction chart to establish that fractions such as $\frac{4}{4}$ represent one whole because the denominator tells how many parts are needed to fill the whole and the numerator tells how many parts are already filled in. Also emphasize that whole numbers such as 3 can be written as a fraction with 1 as a denominator. It takes 1 part to fill the whole and 3 parts are filled in making the number greater than 1. Read the Step Up and Step Ahead instructions with the students. Make sure they know what to do and then have them work independently to complete the task.

SE Breakout(s) and Citation Type(s)	Description of the specific location and hyperlink to the exact location of adopted content	Description of the specific location and hyperlink to the exact location of the proposed new content
Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
3.C Activity	Grade 4, Module 3, Assessment, Summative, Check Up 2 https://www.origoslate.com/tx/slaunch?c=1&t=r esource&i=36888	SS TX Grade 4, Module 3, Assessment, Summative, Check Up 2 https://www.origoslate.com/tx/slaunch?c=2&t=r esource&i=71262
Publisher's rationale for the change		
Page moved to improve content coherence and content alignment to TEKS.		

Substitution Request


Publisher's description of the change

No change to content. Change to placement of content only.

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Check-Up 1

1. On this number line, the distance from 0 to 1 is one whole.



Use the number line to help you write equivalent fractions.

a. $\frac{3}{4} = \frac{\quad}{\quad}$ b. $\frac{10}{8} = \frac{\quad}{\quad}$ c. $\frac{8}{4} = \frac{\quad}{\quad}$

2. The top strip in this fraction chart shows two wholes.

1						1					
$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$
$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$

Write < or > to make each sentence true.

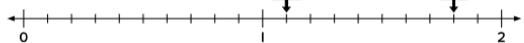
a. $\frac{4}{3} \bigcirc \frac{4}{6}$ b. $\frac{5}{4} \bigcirc \frac{8}{6}$ c. $\frac{10}{6} \bigcirc 1$

3. a. Write three common fractions that are greater than $\frac{2}{3}$ but less than $\frac{7}{4}$.

b. Order the fractions you wrote above from least to greatest.

Check-Up 2

1. On this number line the distance from 0 to 1 is one whole. Write the fraction shown by each arrow.



a. $\frac{\quad}{\quad}$ b. $\frac{\quad}{\quad}$

2. Color the ☐ beside the correct answer.

256×4 is the same as

☐ $800 + 50 + 10$
☐ $800 + 200 + 24$
☐ $200 + 50 + 6$
☐ $8 + 2 + 4$

3. Use the standard multiplication algorithm to calculate the products.

a.
$$\begin{array}{r} 1426 \\ \times \quad 3 \\ \hline \end{array}$$
 b.
$$\begin{array}{r} 23 \\ \times \quad 21 \\ \hline \end{array}$$

4. Bags of cotton candy sell for \$4 each. At the Upton county fair, 1,069 bags were sold. At the Riverhead county fair twice as many bags were sold. How much money was made from cotton candy sales at the Riverhead fair? Show your thinking.

\$ _____

Insert a screenshot of your proposed **new** content.

Substitution Request

Check-Up 1

1. On this number line, the distance from 0 to 1 is one whole.

Use the number line to help you write equivalent fractions.

a. $\frac{3}{4} = \frac{\quad}{\quad}$ b. $\frac{10}{8} = \frac{\quad}{\quad}$ c. $\frac{8}{4} = \frac{\quad}{\quad}$

2. The top strip in this fraction chart shows two wholes.

Write < or > to make each sentence true.

a. $\frac{4}{3} \bigcirc \frac{4}{6}$ b. $\frac{5}{4} \bigcirc \frac{8}{6}$ c. $\frac{10}{6} \bigcirc 1$

3. a. Write three common fractions that are greater than $\frac{2}{3}$ but less than $\frac{7}{4}$.

b. Order the fractions you wrote above from least to greatest.

Check-Up 2

1. On this number line the distance from 0 to 1 is one whole. Write the fraction shown by each arrow.

a. $\frac{\quad}{\quad}$ b. $\frac{\quad}{\quad}$

2. Color the ☐ beside the correct answer.

256×4 is the same as

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Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
3.D.i Activity	Teacher Notes 3.12, Step 3 https://www.origoslate.com/tx/slaunch?c=1&t=page&i=20811	SS TX Teacher Notes 3.12, Step 3 https://www.origoslate.com/tx/slaunch?c=2&t=page&i=20807
Publisher's rationale for the change		
Page removed to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
Replacement lesson continues the development of fractions walls and places greater emphasis on unit fractions and their size.		

Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)

Substitution Request

step 3 teaching the lesson

Say, We are going to use a number line to represent fractions and then use the number line to help us compare fractions. Let's count in steps of one-half. Encourage the class to join you as you count, One-half, two-halves, three-halves, four-halves, etc. Project the number line that represents counting by $\frac{1}{2}$ and emphasize how the arrows above the number line show the addition of $\frac{1}{2}$ each time and the distance between each mark is $\frac{1}{2}$. The fractions below the number line represent the numbers that were said and indicate their location on the number line. Ask, How can we use the number line to decide whether $\frac{1}{2}$ or $\frac{3}{2}$ is greater? ($\frac{3}{2}$ is greater because it is to the right of $\frac{1}{2}$ on the number line.)

Project the number line that shows thirds and fourths. Carefully explain that the number line has been divided into parts in two ways. The marks on the top represent one division and the marks on the bottom represent another. Explain that it is like two different number lines that are laid on top of one another.

Refer to the arrows and markings on the top of the number line and ask, How could we figure out what to label the arrows and the marks above the number line? Encourage students to explain that the arrows show an addition of $\frac{1}{3}$ each time because it starts at 0 and it takes three jumps to reach 1 (the whole). Ask, What should we label each mark? ($\frac{1}{3}$ and $\frac{2}{3}$.) Show the next slide to confirm their answers. Repeat the discussion for the arrows and markings on the bottom of the number line that show fourths.

Ask, How can we use the number line to decide whether $\frac{2}{3}$ or $\frac{3}{4}$ is greater? ($\frac{3}{4}$ is greater than $\frac{2}{3}$ because $\frac{3}{4}$ is to the right of $\frac{2}{3}$ on the number line.)

Project the Step In discussion from Student Journal 3.12 and work through the questions with the whole class. Read the Step Up and Step Ahead instructions with the students. Encourage students to first look at the marks to decide what unit fraction to count by and then count in unit-fraction steps starting at 0 to label the marks. Emphasize that the space between the marks indicates what to count by and the marks show the location of the number on the number line. Make sure they know what to do and then have them work independently to complete the task.

Insert a screenshot of your proposed **new** content.

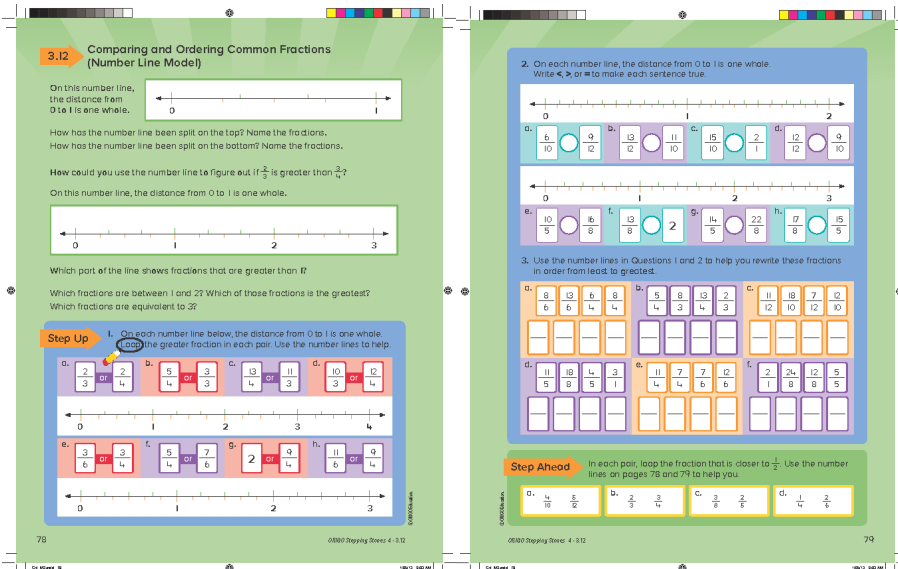
step 3 teaching the lesson

- Say, *We are going to compare fractions and decide whether the fractions are the same or equivalent. Then if they are not equivalent, we will determine which fraction is greater or less than the other fraction. Each fraction tells us two pieces of information that helps us when comparing fractions. The denominator tells us the size of the fraction and the numerator tells us how many unit fractions there are.*
- Project the original unit fractions from Step 2 and ask, *How do each of these unit fractions compare in size?* Refer to one fraction poster to bring out that $\frac{1}{2}$ is the largest unit fraction listed because it only takes 2 parts to fill the whole, whereas $\frac{1}{5}$ is the smallest unit fraction because it takes 5 parts to fill the whole. Emphasize that when comparing fractions the whole must be the same size.
- Say, *Knowing how to compare unit fractions and deciding which is greater is the first step to comparing fractions.* Emphasize that they need to be able to quickly compare two unit fractions and know which is greater. Say, *The second step is knowing how many unit fractions there are in a fraction.*
- Project $\frac{2}{3}$ and $\frac{2}{4}$ on the board and ask, *What unit fractions were used to build each fraction?* Establish that the unit fraction $\frac{1}{3}$ was used to build the fraction $\frac{2}{3}$ and the unit fraction $\frac{1}{4}$ was used to build the fraction $\frac{2}{4}$. Ask, *Which is greater, the unit fraction $\frac{1}{3}$ or the unit fraction $\frac{1}{4}$? ($\frac{1}{3}$.) How do you know?* Refer to the fractions on the board and ask, *What does the numerator tell us for each fraction?* Bring out that two unit fractions were used to build each fraction. Ask, *Which is greater, 2 one-thirds or 2 one-fourths? How do you know?* Refer to the fraction poster to confirm that 2 one-thirds is greater. Explain that this is an example where the number of unit fractions is the same (2) but the size of the unit fractions is different ($\frac{1}{3}$ and $\frac{1}{4}$).
- Project the fractions $\frac{2}{4}$ and $\frac{3}{4}$ and ask, *What is the same about each fraction and what is different?* Bring out that the size of the unit fraction is the same (one-fourth) but the "count" of the unit fractions is different for each fraction. Refer to $\frac{2}{4}$ and ask, *How many one-fourths are represented in this fraction?* (Two.) Refer to $\frac{3}{4}$ and ask, *How many one-fourths are represented in this fraction?* (Three.) *How do you know? Which is greater, 2 one-fourths or 3 one-fourths?* (3 one-fourths.) Refer to the fraction poster to confirm. Emphasize that this is an example where the size of the unit fractions is the same ($\frac{1}{4}$) but the "count" of the unit fractions is different (2 and 3).
- Project the Step In Discussion from Student Journal 3.12 and work through the questions with the whole class. Read the Step Up and Step Ahead Instructions with the students. Refer to the top of page 79 and explain that the fraction chart can be extended when the number of unit fractions is greater than one whole. Display the two fraction wall charts side-by-side and have the students practice finding Improper fractions such as $\frac{7}{4}$. Emphasize that there are 7 one-fourths in the fraction. Demonstrate how they can find $\frac{7}{4}$ on the fraction wall chart by pointing to and counting, *One-fourth, two-fourths, three-fourths, ... seven-fourths.*
- Make sure they know what to do and then have them work independently to complete the task. As you walk around the room, have students say which unit fraction was used to build the fraction and how many unit fractions there are. Encourage students to first compare the fractions by thinking about the size and count of the unit fractions before using the fraction wall chart and to just use the chart to confirm their thinking.

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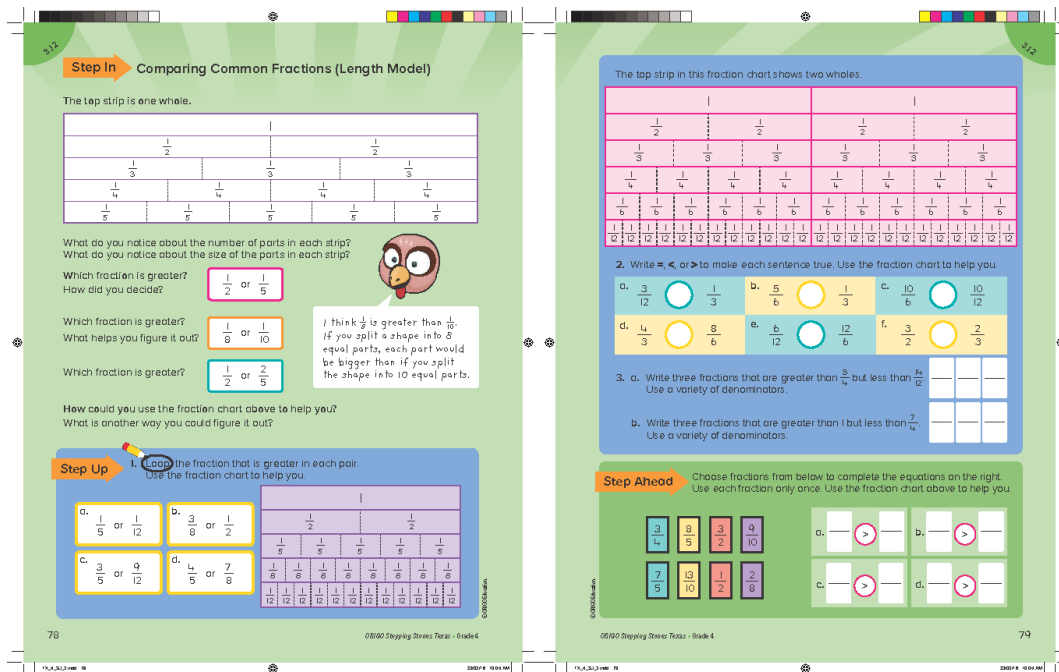
SE Breakout (s) and Citation Type(s)	Description of the specific location and hyperlink to the exact location of adopted content	Description of the specific location and hyperlink to the exact location of the proposed new content
Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
3.D.i Activity	Page 78 & 79, Student Journal 3.12, Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=78 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=79	Page 78 & 79, SS TX Student Journal 3.12, Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=78 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=79
Publisher's rationale for the change		
Page removed to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
Replacement lesson continues the development of fractions walls and places greater emphasis on unit fractions and their size.		

Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)



Insert a screenshot of your proposed **new** content.

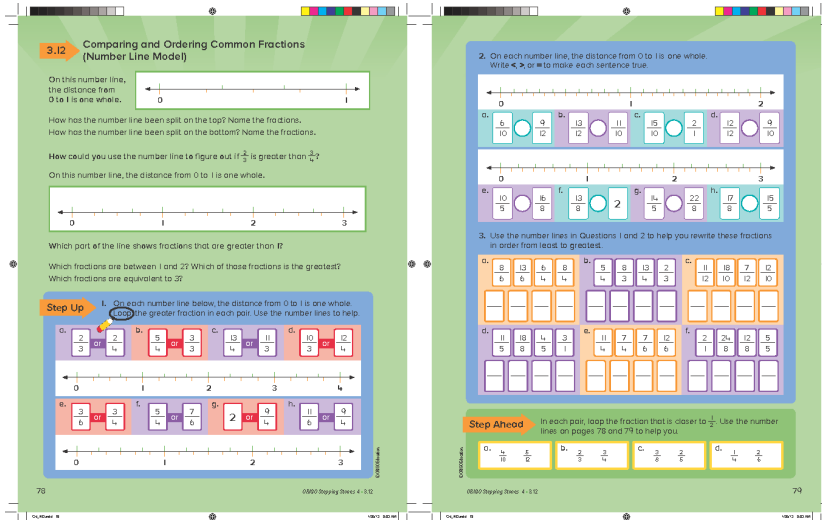
Substitution Request



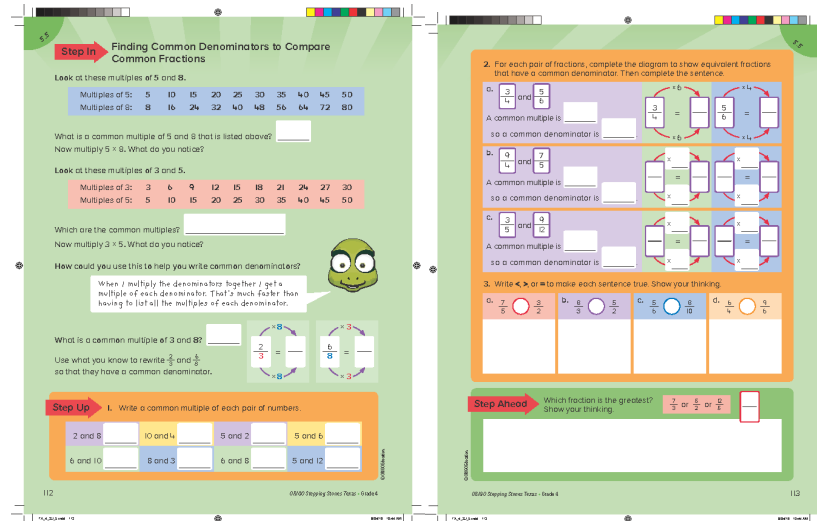
SE Breakout(s) and Citation Type(s)	Description of the specific location and hyperlink to the exact location of adopted content	Description of the specific location and hyperlink to the exact location of the proposed new content
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3.D.iii/3.D.iv Narrative/Activity	Page 78 & 79, Student Journal 3.12, Discussion & Step Up https://www.origoslate.com/tx/sjpage?c=1&=en&g=4&p=78 https://www.origoslate.com/tx/sjpage?c=1&=en&g=4&p=79	Page 112 & 113, SS TX Student Journal 5.5, Step In & Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=112 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=113
Publisher's rationale for the change		
Page removed to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
Replacement lesson using symbols to compare common fractions with different numerators and denominators.		

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Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
3.E.v/3.E.vi, 3.E.x/3.E.xi/3.E.xi i/3.F.ii Narrative/Activity	Page 168 & 169, Student Journal 7.9, Discussion & Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=168 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=169	Page 164 & 165, SS TX Student Journal 7.7, Step In & Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=164 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=165
Publisher's rationale for the change		

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Publisher's description of the change

No changes to content. Change to lesson placement only.

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79 Subtracting Common Fractions (Number Line Model)

Logan went to the movies and bought a small box of popcorn. At the start of the movie, the box was $\frac{7}{8}$ full. At the end of the movie, there was $\frac{3}{8}$ of the box left over.

How much popcorn did Logan eat during the movie?

What equation could you write?

When you subtract fractions what happens to the numerator? What happens to the denominator?

How could you show the difference on this number line?

Logan and her friend bought a box of popcorn to share. They each ate $\frac{3}{8}$ of the popcorn in the box. How much popcorn was left over? How could you figure out the amount?

Step Up 1. Draw and label jumps to match each equation.

a. $\frac{11}{8} - \frac{7}{8} = \frac{4}{8}$

b. $\frac{15}{8} - \frac{9}{8} = \frac{6}{8}$

c. $\frac{16}{8} - \frac{12}{8} = \frac{4}{8}$

Step Ahead Complete each equation so that the difference is between 2 and 3. Use the number lines on pages 168 and 169 to help you.

a. $\frac{16}{8} - \frac{4}{8} =$

b. $\frac{20}{8} - \frac{8}{8} =$

c. $\frac{24}{8} - \frac{12}{8} =$

d. $\frac{28}{8} - \frac{22}{8} =$

Insert a screenshot of your proposed **new** content.

79 Subtracting Common Fractions (Number Line Model)

Terak went to the movies and bought a small box of popcorn. At the start of the movie, the box was $\frac{7}{8}$ full. At the end of the movie, there was $\frac{3}{8}$ of the box left over.

How much popcorn did Terak eat during the movie?

What equation could you write?

When you subtract fractions what happens to the numerator? What happens to the denominator?

How could you show the difference on this number line?

Grace and her friend bought a box of popcorn to share. They each ate $\frac{3}{8}$ of the popcorn in the box. How much popcorn was left over? How could you figure out the amount?

Step Up 1. Draw and label jumps to match each equation.

a. $\frac{11}{8} - \frac{7}{8} = \frac{4}{8}$

b. $\frac{15}{8} - \frac{9}{8} = \frac{6}{8}$

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c. $\frac{24}{8} - \frac{12}{8} =$

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SE Breakout (s) and Citation Type(s)	Description of the specific location and hyperlink to the exact location of adopted content	Description of the specific location and hyperlink to the exact location of the proposed new content
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Substitution Request

Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
3.E.iv, 3.F.ii Narrative	Teacher Notes 7.9, Step 3 https://www.origoslate.com/tx/slaunch?c=1&t=page&i=22586	SS TX Teacher Notes 7.7, Step 3 https://www.origoslate.com/tx/slaunch?c=2&t=page&i=22586
Publisher's rationale for the change		
Page moved and adjusted to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
Teacher notes elaborated to emphasis both take-away and comparison models for subtraction. Images added to the Teacher notes to highlight key points.		

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Substitution Request

step 3 teaching the lesson

Project $13/4 - 8/4 = 5/4$ on the board and encourage students to describe what each of the numerals and symbols tell us. Establish that:

$13/4 - 8/4$ is the same amount as $5/4$.

The denominators are all the same and tells us that each fraction involves the unit fraction one-fourth.

The numerators tell 'how many' one-fourths are included in each fraction.

If you start with 13 one-fourths and take away 8 one-fourths there will be 5 one-fourths left.

The difference between the numbers $13/4$ and $8/4$ is $5/4$. I know because there are 5 one-fourths between the numbers $13/4$ and $8/4$ on the number line.

Say, There is more than one way to interpret a subtraction situation and there are different ways you can show the subtraction on a number line. It depends on how you are thinking. Subtraction can be thought of as take away. Project the number line shown below and use it to explain that they can start by locating $13/4$ on the number line and then drawing jumps that represent how 8 one-fourths are taken away. There are 5 one-fourths left and this is indicated by landing on the number $5/4$ on the number line.

Say, Subtraction can also be thought of as a comparison. Project the number line shown below and use it to explain that they can find the difference between $13/4$ and $8/4$ by first locating their positions on the number line. They then count on from $8/4$ to determine the amount of space between the two numbers. The total of the jumps shows that the distance between $13/4$ and $8/4$ is 5 one-fourths.

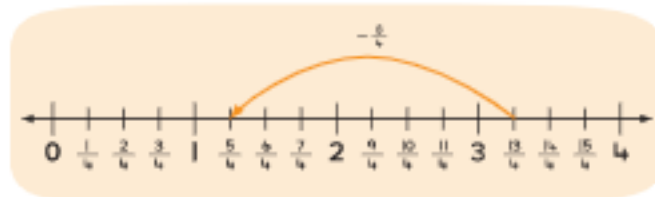
Project the Step In discussion from Student Journal 7.9 and work through the questions with the whole class. Emphasize that the size of the unit fraction has to be the same in order to take them away or make the comparison. Read the Step Up and Step Ahead instructions with the students. Allow students to decide how to use the number line model to find the difference. Make sure they know what to do and then have them work independently to complete the task. As you walk around the room, have students explain how they use the number line to find the difference. Ask, Where is the difference on your number line?

Insert a screenshot of your proposed **new** content.

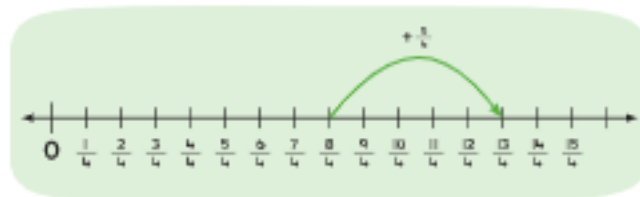
Substitution Request

step 3 teaching the lesson

- Project $^{13}_4 - ^8_4 = ^5_4$ on the board and encourage students to describe what each of the numerals and symbols tell us. Establish that:
 - “ $^{13}_4 - ^8_4$ is the same amount as 5_4 .”
 - “The denominators are all the same, telling us that each fraction involves the unit fraction one-fourth.”
 - “The numerators tell ‘how many’ one-fourths are included in each fraction.”
 - “If you start with 13 one-fourths and take away 8 one-fourths there will be 5 one-fourths left.”
 - “The difference between the numbers $^{13}_4$ and 8_4 is 5_4 . I know because there are 5 one-fourths between the numbers $^{13}_4$ and 8_4 on the number line.”
- Say, [There is more than one way to interpret a subtraction situation and there are different ways you can show the subtraction on a number line. It depends on how you are thinking. Subtraction can be thought of as take away.](#) Project the number line shown below and use it to explain that they can start by locating $^{13}_4$ on the number line and then drawing jumps that represent how 8 one-fourths are taken away. There are 5 one-fourths left and this is indicated by landing on the number 5_4 on the number line.



- Say, [Subtraction can also be thought of as a comparison.](#) Project the number line shown below and use it to explain that they can find the difference between $^{13}_4$ and 8_4 by first locating their positions on the number line. They then count on from 8_4 to determine the amount of space between the two numbers. The total of the jumps shows that the distance between $^{13}_4$ and 8_4 is 5 one-fourths.



- Project the Step In discussion from Student Journal 7.7 and work through the questions with the whole class. Emphasize that the size of the unit fraction has to be the same in order to take them away or make the comparison. Read the Step Up and Step Ahead instructions with the students. Allow students to decide how to use the number line model to find the difference. Make sure they know what to do and then have them work independently to complete the task. As you walk around the room, have students explain how they use the number line to find the difference. Ask, [Where is the difference on your number line?](#)

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SE Breakout (s) and Citation Type(s)	Description of the specific location and hyperlink to the exact location of adopted content	Description of the specific location and hyperlink to the exact location of the proposed new content
Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
3.E.iv Activity	Teacher Notes 7.9, Differentiation https://www.origoslate.com/tx/slaunch?c=1&t=page&i=22587	SS TX Teacher Notes 7.7, Differentiation https://www.origoslate.com/tx/slaunch?c=2&t=page&i=22587
Publisher's rationale for the change		
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Publisher's description of the change		
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extra help

preparation

Each pair of students will need:

12 index cards or similar

1 number line card from The Number Case

activity

Have each pair of students create a set of fraction cards showing $\frac{1}{4}$ through to $\frac{12}{4}$. The cards are then placed facedown. In turn, the students each select two cards and use the number lines to help figure out the difference between them. They score the difference as follows:

2 or greater is 3 points; 1 or 2 is 2 points; and less than 1 is 1 point.

After three rounds, the student with the most points wins the game.

extra practice

preparation

Each pair of students will need:

12 index cards or similar

activity

Have each pair of students create a set of fraction cards showing $\frac{1}{4}$ through to $\frac{12}{4}$. The cards are then placed facedown. In turn, the students each select two cards and figure out the difference between them. They score the difference as follows: 2 or greater is 3 points; 1 or 2 is 2 points; and less than 1 is 1 point. After three rounds, the student with the most points wins the game.

Insert a screenshot of your proposed **new** content.

Substitution Request

extra help

preparation

Each pair of students will need:

- 12 index cards or similar
- 1 number line card from *The Number Case*

activity

Have each pair of students create a set of fraction cards showing $\frac{1}{4}$ through to $\frac{12}{4}$. The cards are then placed facedown. In turn, the students each select two cards and use the number lines to help figure out the difference between them. They score the difference as follows: 2 or greater is 3 points; 1 or 2 is 2 points; and less than 1 is 1 point. After three rounds, the student with the most points wins the game.

extra practice

preparation

Each pair of students will need:

- 12 index cards or similar

activity

Have each pair of students create a set of fraction cards showing $\frac{1}{4}$ through to $\frac{12}{4}$. The cards are then placed facedown. In turn, the students each select two cards and figure out the difference between them. They score the difference as follows: $\frac{8}{4}$ or greater is 3 points, $\frac{4}{4}$ to $\frac{7}{4}$ is points, $\frac{3}{4}$ or less is 1 point. After three rounds, the student with the most points wins the game.

SE Breakout(s) and Citation Type(s)	Description of the specific location and hyperlink to the exact location of adopted content	Description of the specific location and hyperlink to the exact location of the proposed new content
Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
3.E.vi, 3.E.vii Narrative/Activity	Page 172 & 173, Student Journal 7.11, Discussion & Step Up https://www.origoslate.com/tx/sjpage?c=1&len&g=4&p=172	Page 168 & 169, SS TX Student Journal 7.9, Step In & Step Up https://www.origoslate.com/tx/sjpage?c=2&len&g=4&p=168

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<https://www.origoslate.com/tx/sipage?c=2&len&g=4&p=169>

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7.11 Calculating the Difference Between Mixed Numbers (Decomposing Whole Numbers)

Ames has two pet lizards. One is $3\frac{3}{8}$ inches long and the other is $1\frac{7}{8}$ inches long. How could you figure out the difference in their lengths?

Make it easier to subtract by adding 1 to the first number and subtracting 1 from the second number.

How could you use addition to help you calculate the difference?

Look at the number lines below. What is the same about the two methods shown? What is different?

Step Up 1. Calculate the difference. Draw jumps on the number line to show your thinking.

$3\frac{3}{8} - 1\frac{7}{8} =$

2. Calculate the difference. Draw jumps on the number line to show your thinking.

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

b. $4\frac{1}{2} - 3\frac{3}{8} =$

3. Calculate the difference. Show your thinking.

a. $7\frac{1}{4} - 2\frac{3}{8} =$

b. $= 6\frac{2}{8} - 5\frac{3}{8} =$

c. $9\frac{3}{10} - 4\frac{2}{10} =$

d. $= 14\frac{2}{5} - 1\frac{3}{8} =$

e. $16\frac{1}{10} - 11\frac{5}{10} =$

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

Step Ahead Look at these related equations.

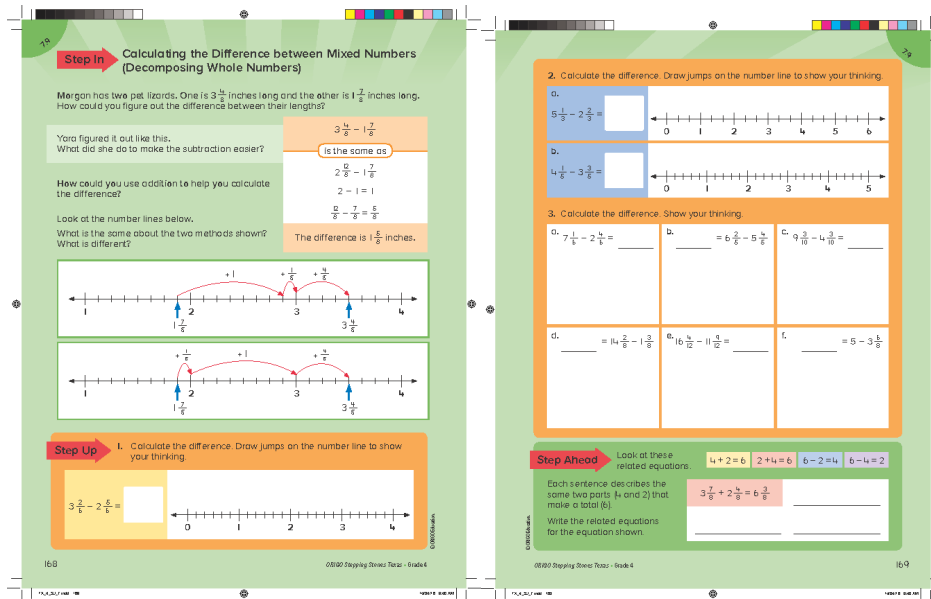
Each sentence describes the same two parts (4 and 2) that make a total (6). Write the related equations for this.

$3\frac{7}{8} + 2\frac{1}{8} = 6\frac{8}{8}$

$4 + 2 = 6$ $2 + 4 = 6$ $6 - 2 = 4$ $6 - 4 = 2$

Insert a screenshot of your proposed **new** content.

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3.E.v, 3.E.vi, 3.E.x, 3.E.xi, 3.E.xii Activity	Grade 4, Module 7, Assessment, Summative, Check Up 2 https://www.origoslate.com/tx/slaunch?c=1&t=resource&i=36896	Grade 4, Module 7, Assessment, Summative, Check Up 1 https://www.origoslate.com/tx/slaunch?c=2&t=resource&i=71275
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Publisher's description of the change		
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Check-Up 1

1. Complete each equation. Show your thinking.

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

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

2. Solve each problem. Show your thinking.

a. There is $\frac{9}{10}$ liter of water and $\frac{3}{10}$ liter of juice. How much more water is there than juice?

b. The large box weighs $3\frac{5}{8}$ lb. The small box weighs $1\frac{7}{8}$ lb. What is the difference in weight?

L

lb

3. This table shows a square number pattern.

a. Complete the table.

Picture (Input)	1	2	3	4	5
Squares (Output)	1	4	9		

b. Write the multiplication equation that you used to figure out each missing number.

Picture 4 =

Picture 5 =

ORIGO Stepping Stones Texas • Grade 4 • Module 7
Q1+2 N.3(E) Q3 N.4(C)

Check-Up 2

1. Color the ☐ beside the correct expression for each.

a. 15×16

☐ is the same as

☐ 30×8

☐ $15 \times 10 \times 6$

☐ $10 \times 5 \times 10 \times 6$

b. 5×36

☐ is the same as

☐ $5 \times 30 \times 6$

☐ $5 \times 30 + 6$

☐ $5 \times 4 \times 9$

c. 25×16

☐ is the same as

☐ $5 \times 5 \times 8 \times 2$

☐ $2 \times 5 + 10 \times 6$

☐ $20 \times 5 \times 16$

2. Color the ☐ beside the closest estimate for each answer.

a. 25×38

☐ between 1,000 and 1,200

☐ greater than 1,200

☐ less than 1,000

b. 22×41

☐ greater than 1,000

☐ less than 800

☐ between 800 and 1,000

3. The school baseball team bought 6 new bats for \$43 each and a bucket of balls for \$32. What was the total cost of the bats? Show your thinking.

\$

4. The table below shows the most popular type of movies in the fourth grade.

a. Write numerals or draw tally marks to complete the table.

Movie Type	Tally	Total
Comedy		
Musical		4
Scary		9

b. What was the least popular type of movie in fourth grade?

\$

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Q1 N.4(D) Q2 N.4(G) Q3 N.5(A) Q4 N.5(A) + N.9(B)

Insert a screenshot of your proposed **new** content.

Check-Up 1

1. Complete each equation. Show your thinking.

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ORIGO Stepping Stones Texas • Grade 4 • Module 7
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ORIGO Stepping Stones Texas • Grade 4 • Module 7
Q1 N.4(D) Q2 N.4(G) Q3 N.5(A) Q4 N.5(A) + N.9(B)

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Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
3.G.i Activity	Page 72 & 73, Student Journal 3.9 Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=72 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=73	(TX) Page 70 & 71, Student Journal 3.8 Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=70 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=71

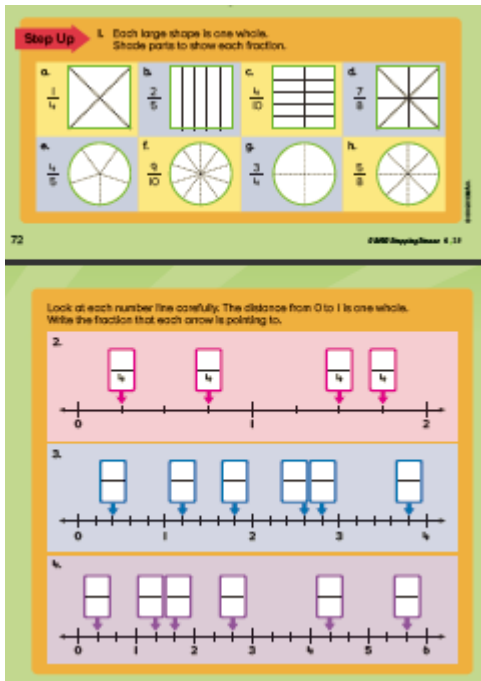
Publisher's rationale for the change

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Publisher's description of the change

Page resequenced and number lines changed to fractions less than one whole.

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3.8 Step In **Reviewing Fraction Concepts**

The large rectangle is one whole.
Into how many equal parts has it been divided?
What fraction describes each part?
Shade parts of the rectangle to show four-sixths.
Is four-sixths closer to one whole, one-half, or zero?

Write four-sixths using numerals.

Which numeral is the denominator? What does it tell you?
Which numeral is the numerator? What does it tell you?

On this number line, the distance from 0 to 1 is one whole.

What fractions are the arrows pointing to?
Which is the least fraction? Which is the greatest?

Step Up I. Each large shape is one whole.
Shade parts to show each fraction.

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

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

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

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

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

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

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

h. $\frac{5}{10}$

3.8

Look at each number line carefully. The distance from 0 to 1 is one whole.
Write the fraction that each arrow is pointing to.

2.

3.

4.

Step Ahead a. Color the star to match these instructions.

- Color $\frac{1}{3}$ of the star blue.
- Color $\frac{1}{4}$ of the star green.
- Color the remaining parts yellow.

b. What fraction of the star is yellow?

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4.A.i Narrative	Teacher notes 2.4 Step 3 https://www.origoslate.com/tx/slaunch?c=1&t=page&i=20694	Teacher notes 2.2 Step 3 https://www.origoslate.com/tx/slaunch?c=2&t=page&i=20702
Publisher's rationale for the change		
Page removed to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
Replacement page provides examples where the addition algorithm can be used.		

Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)

step 3 teaching the lesson

Indicate the numbers represented on the teaching tool and ask, If we added these two numbers together how many groups of one hundred would we have in all? Point to each group of blocks as you say, 4 groups of one hundred and 2 groups of one hundred make 6 groups of one hundred. Move the blocks together to show the addition.

Ask, How many groups of one would we have in total? Point to each group of blocks as you say, 8 groups of one and 4 groups of one make 12 groups of one. What should we do? (Make 1 group of ten from 10 of the ones.) Say, 12 groups of one is the same amount as 1 group of ten and 2 groups of one. Emphasize that sometimes it is necessary to regroup when the amount of groups are 10 or more. Demonstrate the regrouping on the teaching tool or with base-10 blocks.

Ask, How many groups of ten do we have in total? (Seven.) Point to each group of blocks as you say, 5 groups of ten and 1 group of ten plus the extra group of ten from the ones make 7 groups of ten.

Project the addition problem in a vertical format and say, Now let's add 458 and 214 and record the number of groups using the standard addition algorithm. Remind the students that when using the algorithm they start with the ones place and work their way to the next place value to the left.

Say, 8 groups of one and 4 groups of one is 12 groups of one. 12 groups of one is the same amount as 1 group of ten and 2 groups of one. How do we record the regrouping of 10 ones into 1 ten? Show how to record the extra group of ten by writing a 1 above the 5 in the tens place. Periodically remind students that the digit tells the number of groups in each place value. Continue using the supporting language as you model how to record the addition of groups of ten and groups of one hundred.

Project the Step In discussion from Student Journal 2.4 and work through the questions with the whole class. Read the Step Up and Step Ahead instructions with the students. Make sure they know what to do and then have them work independently to complete the task. (Note: Some students may need the additional support of base-10 blocks as they make sense of the standard additional algorithm.)

Insert a screenshot of your proposed **new** content.

step 3 teaching the lesson

- Refer to the numbers from Step 2 and ask, [How should we write the numbers so that we can add them using the standard addition algorithm?](#) Explain that usually the greater number is written on the top and the lesser number is written on the bottom but that it is not necessary. Ask, [Does the total amount change when the numbers are switched? Why not?](#)
- Invite a confident student to record the steps of the algorithm on the board. Direct the students with the base-10 materials to move to the center of the room as each place-value group is added. Encourage students to describe what happens when regrouping is necessary and how it should be recorded. Ensure that the volunteers demonstrate the regrouping with the base-10 materials. Have students use language that supports place-value understanding such as, “6 groups of one hundred and 4 groups of one hundred make 10 groups of one hundred” and “10 hundreds is the same amount as 1 thousand.”
- Have students work in pairs to repeat the activity above with the numbers 1,078 and 254. Encourage students to use place-value language as they regroup using the base-10 blocks. Afterward, select a group of students to model and explain their thinking.
- Project the Step In discussion from Student Journal 2.2 and work through the questions with the whole class. Read the Step Up and Step Ahead instructions with the students. Encourage students to estimate the total before performing the computation. Make sure they know what to do and then have them work independently to complete the task.

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Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
4.A.i Activity	Page 38, Student Journal 2.4 discussion https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=38	Page 34, SS TX Student Journal 2.2 Step In https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=34
Publisher’s rationale for the change		
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Publisher's description of the change

Replacement page involves adding three-digit numbers using the standard algorithm

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2.4 Reviewing the Standard Algorithm for Addition (Composing Tens)

What does this table show?

How could you figure out the total attendance on Saturday?

Theater Attendance		
	Saturday	Sunday
Morning	74	67
Afternoon	115	125

I can figure that out in my head...
 $115 + 70 = 185$ $185 + 4 = 189$

How could you figure out the total attendance on Sunday?

Logan used the standard addition algorithm. He followed these steps.

Step 1	Step 2	Step 3	Step 4																																																
<table border="1"><thead><tr><th>H</th><th>T</th><th>O</th></tr></thead><tbody><tr><td>1</td><td>2</td><td>5</td></tr><tr><td>+</td><td>6</td><td>7</td></tr><tr><td></td><td></td><td></td></tr></tbody></table>	H	T	O	1	2	5	+	6	7				<table border="1"><thead><tr><th>H</th><th>T</th><th>O</th></tr></thead><tbody><tr><td>1</td><td>2</td><td>5</td></tr><tr><td>+</td><td>6</td><td>7</td></tr><tr><td></td><td></td><td>2</td></tr></tbody></table>	H	T	O	1	2	5	+	6	7			2	<table border="1"><thead><tr><th>H</th><th>T</th><th>O</th></tr></thead><tbody><tr><td>1</td><td>2</td><td>5</td></tr><tr><td>+</td><td>6</td><td>7</td></tr><tr><td></td><td>9</td><td>2</td></tr></tbody></table>	H	T	O	1	2	5	+	6	7		9	2	<table border="1"><thead><tr><th>H</th><th>T</th><th>O</th></tr></thead><tbody><tr><td>1</td><td>2</td><td>5</td></tr><tr><td>+</td><td>6</td><td>7</td></tr><tr><td></td><td>9</td><td>2</td></tr></tbody></table>	H	T	O	1	2	5	+	6	7		9	2
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What did Logan do in each step?

What does the red numeral in the tens column mean?

What is another way to add these numbers?

The standard algorithm is useful when the numbers are "messy" or difficult to add.

Insert a screenshot of your proposed **new** content.

22

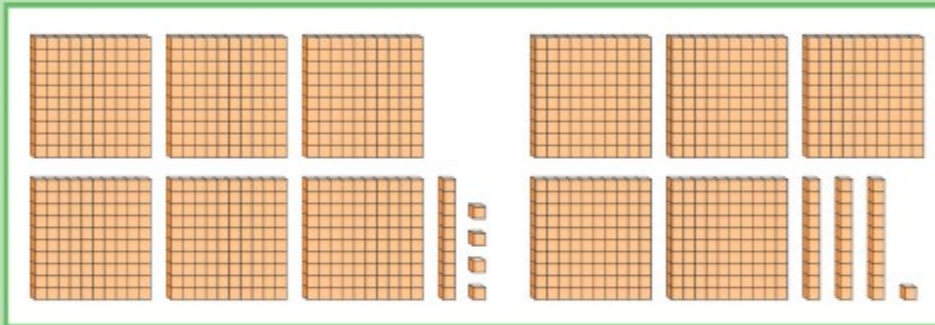
Step In → Using the Standard Addition Algorithm

What does this table show?

How could you figure out the total drinks sold in Week 1?

Drink Sales		
	Week 1	Week 2
Juice	614	857
Milk	531	435

Archie used blocks to represent the sales from each type of drink. He then moved the blocks together to figure out the total.



What is the total value of the blocks? How do you know?

What is another way to represent the same value?

I could trade 10 hundreds blocks for 1 thousands block.



How could you figure out the total drinks sold in Week 2?

Kuma used the standard addition algorithm to calculate the total.

What numbers should she write to complete the calculation?

How are the 12 ones represented in the algorithm?

8	5	7
+	4	3
		5
	9	2

34

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4.A.iv Activity	<p>Oage 82, Student Journal 4.2 discussion https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=82</p>	<p>Page 42, SS TX Student Journal 2.6 Step In https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=42</p>
Publisher's rationale for the change		
Page moved to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
Lesson resequenced.		

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4.2

Using the Standard Subtraction Algorithm (Decomposing Multiple Places)

Imagine you had \$345 and you bought this bike. How much money would you have left over?
How do you know?



Follow these steps of the standard subtraction algorithm to calculate the difference.

Step 1	Step 2	Step 3																																													
Look at the digits in each place. Can you subtract each place easily?	You need 1 ten to help subtract the ones. Cross out 4 tens and write 3 tens.	Cross out the ones digit and write the new number. 345 is now written as 3 hundreds, 3 tens, and 15 ones.																																													
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You need 1 hundred to help subtract the tens. Cross out 3 hundreds and write 2 hundreds.	Add the 10 tens that you have just broken up to the 3 tens that you already have. You now have 13 tens. Write the number.	345 is now written as 2 hundreds, 13 tens, and 15 ones. Subtract the ones, tens, then hundreds to find the difference.																																													
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SSS Step by Step 4-4.2

Insert a screenshot of your proposed **new** content.


Substitution Request

26

Step In

Using the Standard Subtraction Algorithm

Imagine you had \$345 and you bought this bike. How much money would you have left over?
How do you know?



Follow these steps of the standard subtraction algorithm to calculate the difference.

Step 1	Step 2	Step 3																																																
Look at the digits in each place. Can you subtract each place easily?	You need 1 ten to help subtract the ones. Cross out 4 tens and write 3 tens.	Cross out the ones digit and write the new number. 345 is now written as 3 hundreds, 3 tens, and 15 ones.																																																
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DRIGO Stepping Stones Texas • Grade 4

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Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content

Substitution Request

4.A.ii Activity	Page 282 & 283, Student Journal 12.6 Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=282 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=283	Page 210 & 211, SS TX Student Journal 9.6 Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=210 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=211
Publisher's rationale for the change		
Page removed to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
Replacement activity involves adding decimals using the standard algorithm.		

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Substitution Request

Step Up 1. Complete each equation. You can use the pictures to help you. Each large square is one whole.

a. $0.5 + 0.34 =$ <input type="text"/>	b. $0.3 + 0.25 =$ <input type="text"/>	c. $1.0 + 0.43 =$ <input type="text"/>
d. $0.1 + 0.11 =$ <input type="text"/>	e. $0.6 + 0.20 =$ <input type="text"/>	f. $0.4 + 0.03 =$ <input type="text"/>

82 © 2003 Marshall Cavendish

2. Use what you know about equivalence to calculate each total.

a. $\frac{6}{10} + \frac{15}{100} =$ <input type="text"/>	b. $\frac{5}{10} + \frac{5}{100} =$ <input type="text"/>	c. $\frac{2}{10} + \frac{46}{100} =$ <input type="text"/>
d. $\frac{8}{10} + \frac{12}{100} =$ <input type="text"/>	e. $2\frac{1}{10} + \frac{30}{100} =$ <input type="text"/>	f. $\frac{1}{10} + 2\frac{7}{100} =$ <input type="text"/>
g. $\frac{14}{100} + \frac{6}{10} =$ <input type="text"/>	h. $\frac{2}{100} + \frac{9}{10} =$ <input type="text"/>	i. $3\frac{33}{100} + \frac{4}{10} =$ <input type="text"/>

3. Choose six totals from Question 2. Write each as a decimal fraction.

a. <input type="text"/>	b. <input type="text"/>	c. <input type="text"/>	d. <input type="text"/>	e. <input type="text"/>	f. <input type="text"/>
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4. Show each decimal fraction as the sum of three numbers.

a. $1.34 =$ <input type="text"/> $+$ <input type="text"/> $+$ <input type="text"/>	b. $2.47 =$ <input type="text"/> $+$ <input type="text"/> $+$ <input type="text"/>
c. $1.45 =$ <input type="text"/> $+$ <input type="text"/> $+$ <input type="text"/>	d. $2.96 =$ <input type="text"/> $+$ <input type="text"/> $+$ <input type="text"/>
e. $0.67 =$ <input type="text"/> $+$ <input type="text"/> $+$ <input type="text"/>	f. $1.50 =$ <input type="text"/> $+$ <input type="text"/> $+$ <input type="text"/>
g. $1.0 =$ <input type="text"/> $+$ <input type="text"/> $+$ <input type="text"/>	h. $0.1 =$ <input type="text"/> $+$ <input type="text"/> $+$ <input type="text"/>

Insert a screenshot of your proposed **new** content.

Substitution Request

Step In Using the Standard Algorithm to Add Decimal Fractions

These two packages were weighed in kilograms. Estimate the mass of the two packages together.

How could you figure out the exact mass of the two packages?

These numbers are too "messy" to add in my head. I need to write them down.

Amber used the standard addition algorithm to figure out the total. What steps does she follow?

Step 1

T O t h

$$\begin{array}{r} 6.8 \\ + 5.72 \\ \hline \end{array}$$

Step 2

T O t h

$$\begin{array}{r} 6.8 \\ + 5.72 \\ \hline 12.52 \end{array}$$

Step 3

T O t h

$$\begin{array}{r} 6.8 \\ + 5.72 \\ \hline 12.52 \end{array}$$

Amber wrote 6.8 in the top row. Does the total change if she writes 6.80? What does the 1 above the 6 represent?

Step Up 1. Calculate the total mass of each pair of packages.

a.

8.34 kg 3.25 kg

T O t h

$$\begin{array}{r} 8.34 \\ + 3.25 \\ \hline \end{array}$$

b.

12.47 kg 14.08 kg

T O t h

$$\begin{array}{r} 12.47 \\ + 14.08 \\ \hline \end{array}$$

c.

6.6 kg 12.81 kg

T O t h

$$\begin{array}{r} 6.6 \\ + 12.81 \\ \hline \end{array}$$

2. Calculate the total mass of these packages.

a.

6.48 kg 2.37 kg

T O t h

$$\begin{array}{r} 6.48 \\ + 2.37 \\ \hline \end{array}$$

b.

8.92 kg 5.42 kg

T O t h

$$\begin{array}{r} 8.92 \\ + 5.42 \\ \hline \end{array}$$

c.

4.73 kg 10.8 kg

T O t h

$$\begin{array}{r} 4.73 \\ + 10.8 \\ \hline \end{array}$$

d.

8.05 kg 7.58 kg

T O t h

$$\begin{array}{r} 8.05 \\ + 7.58 \\ \hline \end{array}$$

e.

13.9 kg 7.03 kg

T O t h

$$\begin{array}{r} 13.9 \\ + 7.03 \\ \hline \end{array}$$

f.

15.82 kg 6.59 kg

T O t h

$$\begin{array}{r} 15.82 \\ + 6.59 \\ \hline \end{array}$$

Step Ahead This student seems to repeat the same error on a test. Describe the mistake in words.

2.3

+ 4.6

6.9

4.7

+ 3.8

7.15

5.2

+ 3.5

8.7

7.3

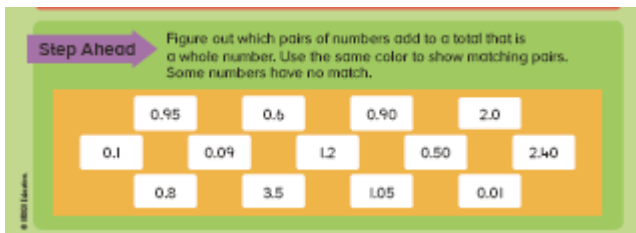
+ 7.9

14.12

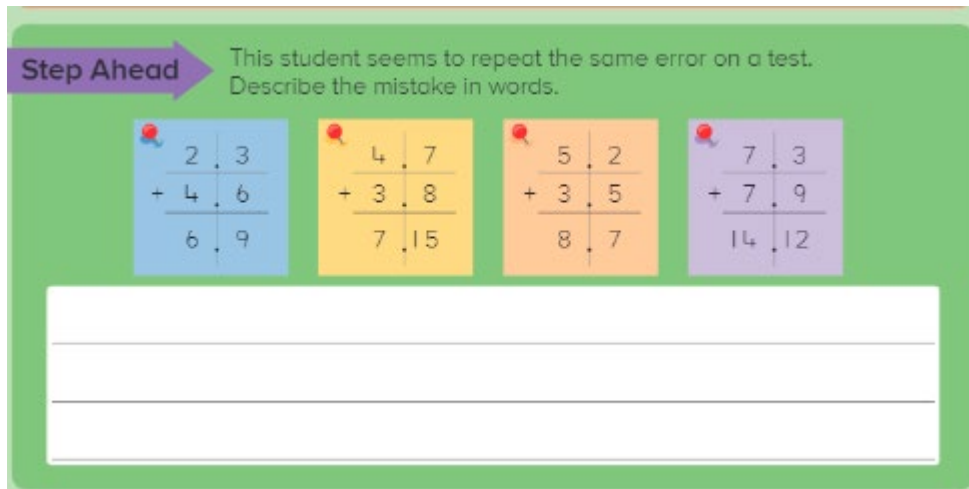
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4.A.iii Activity	Page 283, Student Journal 12.6 Step Ahead https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=283	Page 211, SS TX Student Journal 9.6 Step Ahead https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=211
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4.A.iii Activity	Teacher notes 4.2 Step 3 https://www.origoslate.com/tx/slaunch?c=1&t=page&i=20856	SS TX Teacher notes 2.6 Step 3 https://www.origoslate.com/tx/slaunch?c=2&t=page&i=20856
Publisher's rationale for the change		
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Publisher's description of the change		
Lesson resequenced.		

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step 3 teaching the lesson

Project 326 – 157 in a vertical format and have students offer estimates for the difference and record them on the board. Invite four volunteers to the front of the class. Assign one person to each of the three digits in the number 326 and have them use base-10 blocks to represent what their digit means and then have them stand to one side. For example, the student assigned to the digit 3 should show 3 groups of one hundred with their materials.

The fourth volunteer will be the 'regrouper'. Have them stand on the other side of the room near the remaining base-10 blocks. Refer to the algorithm on the board and remind the students that the top number indicates the number of groups they have available for each place-value position and the bottom number indicates the number of groups that need to be taken away for each place-value position.

Ask, **What place value do we subtract first?** (The ones place.) Direct the volunteer whose materials represent 6 groups of one to the middle of the room. Invite a fifth volunteer to come up and be the 'taker'. Ask, **How many groups of one is the 'taker' supposed to take?**

(7 groups of one.) **How do you know?** (The 7 digit is in the ones place and on the bottom row of the algorithm.) **Are there enough groups available? How can we make more groups of one?**

Refer to the table that was completed earlier and ask, **How can we use the table you made to help us regroup the number 326 so that there are enough groups of one for the 'taker' to take 7 groups of one?** Through discussion, encourage students to suggest that the new grouping should be 3 hundreds, 1 ten, and 16 ones.

Direct the student whose base-10 blocks represent 2 groups of ten to go to the 'regrouper'. The 'regrouper' then trades the 2 groups of ten for 1 group of ten and 10 groups of one. Emphasize that the total amount stayed the same. The student then gives the 10 groups of one to the student who has 6 groups of one to make a total of 16 groups of one, and returns to the side of the room.

Ask, **How do we record the regrouping steps on the standard algorithm?**

Demonstrate how to cross out the 2 and write 1 above it and then cross out the 6 and write 16 above it. Say, 2 groups of ten and 6 groups of one is the same amount as 1 group of ten and 16 groups of one. **Are there enough groups of one for the 'taker' to take the 7 groups of one now?** Instruct the 'taker' to take the groups and return the blocks to the 'regrouper'. Continue the process, discussion, and recording until all of the place-value groupings have been subtracted.

Project the Step In discussion from Student Journal 4.2 and work through the questions with the whole class. Read the Step Up and Step Ahead instructions with the students. Remind the students to make an estimate of the difference before they perform the calculation. Make sure they know what to do and then have them work independently to complete the task.

Project the Step In discussion from Student Journal 4.2 and work through the questions with the whole class. Read the Step Up and Step Ahead instructions with the students. Remind the students to make an estimate of the difference before they perform the calculation. Make sure they know what to do and then have them work independently to complete the task.

Insert a screenshot of your proposed **new** content.

Substitution Request

step 3 teaching the lesson

- Project **326 – 157** in a vertical format. Have students offer estimates for the difference and record them on the board. Invite four volunteers to the front of the class. Assign one person to each of the three digits in the number 326 and have them use base-10 blocks to represent what their digit means and then have them stand to one side. For example, the student assigned to the digit 3 should show 3 groups of one hundred with their materials.
- The fourth volunteer will be the "regrouper". Have them stand on the other side of the room near the remaining base-10 blocks. Refer to the algorithm on the board and remind the students that the top number indicates the number of groups they have available for each place-value position and the bottom number indicates the number of groups that need to be taken away for each place-value position.
- Ask, **What place value do we subtract first?** (The ones place.) Direct the volunteer whose materials represent 6 groups of one to the middle of the room. Invite a fifth volunteer to come up and be the "taker". Ask, **How many groups of one is the "taker" supposed to take?** (7 groups of one.) **How do you know?** (The 7 digit is in the ones place and on the bottom row of the algorithm.) **Are there enough groups available? How can we make more groups of one?**
- Refer to the table that was completed earlier and ask, **How can we use the table you made to help us regroup the number 326 so that there are enough groups of one for the "taker" to take 7 groups of one?** Through discussion, encourage students to suggest that the new grouping should be 3 hundreds, 1 ten, and 16 ones. Direct the student whose base-10 blocks represent 2 groups of ten to go to the "regrouper." The "regrouper" then trades the 2 groups of ten for 1 group of ten and 10 groups of one. Emphasize that the total amount stayed the same. The student then gives the 10 groups of one to the student who has 6 groups of one to make a total of 16 groups of one, and returns to the side of the room.
- Ask, **How do we record the regrouping steps on the standard algorithm?** Demonstrate how to cross out the 2 and write 1 above it and then cross out the 6 and write 16 above it. Say, **2 groups of ten and 6 groups of one is the same amount as 1 group of ten and 16 groups of one. Are there enough groups of one for the "taker" to take the 7 groups of one now?** Instruct the "taker" to take the groups and return the blocks to the "regrouper." Continue the process, discussion, and recording until all the place-value groupings have been subtracted.
- Project the Step In discussion from Student Journal 2.6 and work through the questions with the whole class. Read the Step Up and Step Ahead instructions with the students. Remind the students to make an estimate of the difference before they perform the calculation. Make sure they know what to do and then have them work independently to complete the task.

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4.A.v Narrative	Teacher notes 7.3 Step 3 https://www.origoslate.com/tx/slaunch?c=1&t=page&i=22562	SS TX Teacher notes 10.3 Step 3 https://www.origoslate.com/tx/slaunch?c=2&t=page&i=22647
Publisher's rationale for the change		
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Publisher's description of the change		
New reference provides opportunity to subtract decimals using the standard algorithm.		

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step 3 teaching the lesson

Project the Step In discussion from Student Journal 7.3 and work through the questions with the whole class. Organize the students into small groups and distribute a set of counters and a bag to each group. Project the empty multiplication expression and explain that they are going to each draw four counters from the bag and write the numbers to form a multiplication expression like the one on the board. The counters are replaced in the bag each time. After all the students have created their expressions, direct them to draw and use a rectangle to determine the partial products and then the final product.

To add variety, have the students try to create the greatest (least) product in the group
or have them choose a target product and try to create a product as close to the target
as possible.

Refer to Student Journal 7.3 and read the Step Up and Step Ahead instructions with the students. Make sure they know what to do and then have them work independently to complete the task.

Insert a screenshot of your proposed **new** content.

Substitution Request

step 3 teaching the lesson

- Project the picture of two dogs shown above and say, The weight of each dog is measured in kilograms. What is your estimate of the difference in weight? What digits did you look at to make your estimate? How could you figure out the exact difference? Project an empty number line and invite volunteers to draw jumps on the number line to show their thinking. Other students may prefer to write number sentences.
- Relate the subtraction problem back to the Step 2 discussion. Write the incomplete equation shown below on the board. Choose a volunteer to come out the front and carry out the steps to complete the equation. Bring out that when subtracting decimal fractions using the algorithm the same steps apply as those used when subtracting whole numbers.

$$\begin{array}{r} 16.94 \\ - 13.40 \\ \hline \end{array}$$

- Refer to the weight of the lighter dog and say, This dog weighs 13.4 kg but we recorded its weight as 13.40 kg in our workings. Does this matter? Does the answer change if we record its weight as 13.4 kg? Establish that 0.4 is equivalent to 0.40 so the weight can be recorded either way. If necessary, project the hundredths grid and shade 40 parts to show that 4 tenths is equivalent to 40 hundredths. Highlight the importance of aligning the places and having the decimal point in the correct position.
- Project the different weights for each dog and then have students work independently to figure out the difference in weight. Encourage them to share their solutions and strategies with another student.
- Project the Step In discussion from Student Journal 10.3 and work through the questions with the whole class. Read the Step Up and Step Ahead instructions with the students. Make sure they know what to do and then have them work independently to complete the task. For Question 2, ask them to first estimate the difference in their head and then use a strategy of their choice to figure out the exact difference.

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4.A.vi Narrative	Teacher notes 7.6 Step 3 https://www.origoslate.com/tx/slaunch?c=1&t=page&i=22574	SS TX Teacher notes 10.3 Step 3 https://www.origoslate.com/tx/slaunch?c=2&t=page&i=22647
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New reference provides opportunity to subtract decimals using the standard algorithm.

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step 3 teaching the lesson

Project the 15-by-16 rectangular array on the board and say, We are going to explore different ways to partition this rectangle to find partial products that can be added together to find the total product. Allow time for the students to brainstorm ideas with a partner. Then invite students to share the different partitions and discuss the advantages and disadvantages to each partition. Emphasize that they should look for partitions that make it easier to multiply and not harder. Emphasize that regardless of the way the rectangle is partitioned, the total number of squares remains the same.

Ask, What multiplication sentence describes the total amount of squares ?

Project

$15 \times 16 = \underline{\hspace{1cm}}$ with the array partitioned into tens and ones as shown above.

Say, We are going to work with the partitioning that splits the rectangle into tens and ones. Point to each section as you ask, What multiplication sentence describes the amount in the first section? ($10 \times 10 = 100$.) What sentence describes the amount in the section to the right of that section? ($10 \times 6 = 60$.) What sentence describes the amount in the lower left section? ($5 \times 10 = 50$.) What sentence describes the amount in the section to the right of that section? ($5 \times 6 = 30$.) Record the sentences on the board and ask, How many squares are there in the whole rectangle? (240.) How do you know?

Repeat the discussion for finding the number of squares in an 18-by-26 rectangular array.

Project the Step In discussion from Student Journal 7.6 and work through the questions with the whole class. Read the Step Up and Step Ahead instructions with the students. Make sure they know what to do and then have them work independently to complete the task. Continue to reinforce the idea that the dimensions tell the number of rows and the amount of squares in each row even though they are not individually drawn.

Substitution Request

Insert a screenshot of your proposed **new** content.

step 3 teaching the lesson

- Project the picture of two dogs shown above and say, *The weight of each dog is measured in kilograms. What is your estimate of the difference in weight? What digits did you look at to make your estimate? How could you figure out the exact difference?* Project an empty number line and invite volunteers to draw jumps on the number line to show their thinking. Other students may prefer to write number sentences.
- Relate the subtraction problem back to the Step 2 discussion. Write the incomplete equation shown below on the board. Choose a volunteer to come out the front and carry out the steps to complete the equation. Bring out that when subtracting decimal fractions using the algorithm the same steps apply as those used when subtracting whole numbers.

$$\begin{array}{r} 16.94 \\ - 13.40 \\ \hline \end{array}$$

- Refer to the weight of the lighter dog and say, *This dog weighs 13.4 kg but we recorded its weight as 13.40 kg in our workings. Does this matter? Does the answer change if we record its weight as 13.4 kg?* Establish that 0.4 is equivalent to 0.40 so the weight can be recorded either way. If necessary, project the hundredths grid and shade 40 parts to show that 4 tenths is equivalent to 40 hundredths. Highlight the importance of aligning the places and having the decimal point in the correct position.
- Project the different weights for each dog and then have students work independently to figure out the difference in weight. Encourage them to share their solutions and strategies with another student.
- Project the Step In discussion from Student Journal 10.3 and work through the questions with the whole class. Read the Step Up and Step Ahead instructions with the students. Make sure they know what to do and then have them work independently to complete the task. For Question 2, ask them to first estimate the difference in their head and then use a strategy of their choice to figure out the exact difference.

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4.A.vi Activity	Page 162 & 163, Student Journal 7.6 Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=162	Page 228 & 229, SS TX Student Journal 10.3 Step Up

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	https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=163	https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=228 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=229
Publisher's rationale for the change		
Page removed to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
New reference provides opportunity to subtract decimals using the standard algorithm.		

Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)

The first screenshot shows a 'Step Up' section for the problem 36×24 . It includes an area model with a large yellow rectangle divided into four smaller rectangles. The dimensions are labeled as 30 and 6 on the left, and 20 and 4 on the bottom. The area of the large rectangle is labeled as 600. To the right of the area model is a table for partial products:

36×24	
$30 \times$	$20 = 600$
$30 \times$	$4 =$
$6 \times$	$20 =$
$6 \times$	$4 =$
Total	

The second screenshot shows two problems, a and b, each with an area model and a table for partial products.

Problem a: 19×32 . The area model is a purple rectangle divided into four smaller rectangles. The dimensions are labeled as 10 and 9 on the left, and 30 and 2 on the bottom. The table for partial products is:

19×32	
\times	$=$
\times	$=$
\times	$=$
\times	$=$
Total	

Problem b: 46×35 . The area model is a blue rectangle divided into four smaller rectangles. The dimensions are labeled as 40 and 6 on the left, and 30 and 5 on the bottom. The table for partial products is:


46×35	
\times	$=$
\times	$=$
\times	$=$
\times	$=$
Total	

Insert a screenshot of your proposed **new** content.

Substitution Request

10.3 Step In Using the Standard Algorithm to Subtract Decimal Fractions

How could you figure out the difference in mass between these two dogs?



It must be about 3 kg because the difference between 17 and 14 is 3.

These students figured it out like this.

Laura

$$\begin{array}{r} 17.65 \\ - 14.20 \\ \hline 3.45 \end{array}$$

Carlos

$$\begin{array}{r} 17.65 \\ - 14.2 \\ \hline 3.45 \end{array}$$


Dorothy

$$\begin{array}{r} 17.65 \\ - 14.2 \\ \hline 3.45 \end{array}$$

What are the steps in each method? Whose method do you prefer? Why?

What other way could you calculate the difference?

How could you figure out the difference in cost between these two items?



The numbers are a bit "messy" so I would use a written method.

Step Up I. Use Dorothy's method to figure out each difference.

a. T O t h

$$\begin{array}{r} 7.86 \\ - 3.40 \\ \hline \end{array}$$

b. T O t h

$$\begin{array}{r} 18.93 \\ - 6.51 \\ \hline \end{array}$$

c. T O t h

$$\begin{array}{r} 24.07 \\ - 12.03 \\ \hline \end{array}$$

10.3

2. Figure out the difference between each pair of weights. Show your thinking.

a. 6.2 kg 9.85 kg

b. 7.64 kg 5.03 kg

c. 15.10 kg 27.2 kg

d. 5.3 kg 28.7 kg

e. 8.07 kg 19.17 kg

f. 34.55 kg 13.05 kg

Step Ahead A student used the standard subtraction algorithm to figure out $16.45 - 3.2$. Write the correct answer. Then explain the mistake that was made.

$$\begin{array}{r} 16.45 \\ - 3.2 \\ \hline 16.13 \end{array}$$

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4.A.v Activity	Page 156 & 157, Student Journal 7.3 Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=156	Page 228 & 229, SS TX Student Journal 10.3 Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=228 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=229
Publisher's rationale for the change		
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New reference provides opportunity to subtract decimals using the standard algorithm.

Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)

The screenshot shows a math worksheet with a green border. At the top, a blue arrow points to the text 'Step Up'. Below this, there are two main sections. The first section, labeled '1.', contains a multiplication problem template: a box for the first factor, followed by 'x', a box for the second factor, followed by '=', and a box for the product. Below this is a large empty box for the student's work. To the right of this box is a 'Total' field. The second section, labeled '2.', contains two similar multiplication problem templates, one labeled 'a.' and one labeled 'b.', each with a 'Total' field. The third section, labeled '3.', contains three columns of multiplication problems. Column 'a.' has the problem 3×146 and shows the partial products $3 \times 100 = 300$, $3 \times 40 =$, and $3 \times 6 =$. Column 'b.' has the problem 8×374 and shows the partial products $8 \times 300 =$, $8 \times 70 =$, and $8 \times 4 =$. Column 'c.' has the problem 5×703 and shows the partial products $5 \times 700 =$ and $5 \times 3 =$. Each column has a 'Total' field at the bottom.

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58169 Step Up Book 4-73


Insert a screenshot of your proposed **new** content.

Substitution Request

10.3
10.3

Step In Using the Standard Algorithm to Subtract Decimal Fractions

How could you figure out the difference in mass between these two dogs?



It must be about 3 kg because the difference between 17 and 14 is 3.

These students figured it out like this.

Laura

$$\begin{array}{r} 17.65 \\ - 0.20 \\ \hline 17.45 \\ - 14.00 \\ \hline 3.45 \end{array}$$

Carlos


$$\begin{array}{r} 17.65 - 14.2 \\ 17 - 14 = 3 \\ \frac{65}{100} - \frac{20}{100} = \frac{45}{100} \\ \text{Difference is } 3\frac{45}{100} \end{array}$$

Dorothy

$$\begin{array}{r} 17.65 \\ - 14.2 \\ \hline 3.45 \end{array}$$

What are the steps in each method? Whose method do you prefer? Why?
What other way could you calculate the difference?

How could you figure out the difference in cost between these two items?



The numbers are a bit "messy" so I would use a written method.

Step Up I. Use Dorothy's method to figure out each difference.

a. T O t h

$$\begin{array}{r} 7.86 \\ - 3.40 \\ \hline \end{array}$$

b. T O t h

$$\begin{array}{r} 18.93 \\ - 6.51 \\ \hline \end{array}$$

c. T O t h

$$\begin{array}{r} 24.07 \\ - 12.03 \\ \hline \end{array}$$

2. Figure out the difference between each pair of weights. Show your thinking.

a. 6.2 kg 9.85 kg

b. 7.64 kg 5.03 kg

c. 15.10 kg 27.2 kg

d. 5.3 kg 28.7 kg

e. 8.07 kg 19.17 kg

f. 34.55 kg 13.05 kg

Step Ahead A student used the standard subtraction algorithm to figure out $16.45 - 3.2$. Write the correct answer. Then explain the mistake that was made.

$$\begin{array}{r} 16.45 \\ - 3.2 \\ \hline 16.13 \end{array}$$

228
229

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4.B.i Activity	Page 98 & 99, Student Journal 4.10 Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=98 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=99	Page 56 & 57, SS TX Student Journal 3.1 Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=56 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=57
Publisher's rationale for the change		
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Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)

The screenshot shows a math worksheet page numbered 98. The page is titled "Step Up" and contains two main sections. The first section, labeled "1. Use a pattern to help you write the products.", includes a table with multiplication problems involving the number 6 and place values (ones, tens, hundreds, thousands). The second section, labeled "2. Use a pattern to help you complete these equations.", contains four sub-sections (a, b, c, d) with multiplication problems. The third section, labeled "3. Loop all the expressions that have the middle number as the product.", includes two sub-sections (a, b) with multiplication problems and a central number to be circled.

Step Up 1. Use a pattern to help you write the products.

6×2 ones = <u>12</u> ones	50	$6 \times 2 =$ <u>12</u>
6×2 tens = <u> </u> tens	50	$6 \times 20 =$ <u> </u>
6×2 hundreds = <u> </u> hundreds	50	$6 \times 200 =$ <u> </u>
6×2 thousands = <u> </u> thousands	50	$6 \times 2,000 =$ <u> </u>

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2. Use a pattern to help you complete these equations.

a. $9 \times 4 =$
 $9 \times 40 =$
 $9 \times 400 =$
 $9 \times 4,000 =$

b. $8 \times 9 =$
 $8 \times 90 =$
 $8 \times 900 =$
 $8 \times 9,000 =$

c. $7 \times 6 =$
 $70 \times 6 =$
 $700 \times 6 =$
 $7,000 \times 6 =$

d. $3 \times 7 =$
 $30 \times 7 =$
 $300 \times 7 =$
 $3,000 \times 7 =$

3. Loop all the expressions that have the middle number as the product.

a. 12×20 60×4 **240** 3×80 400×6

b. $4 \times 9,000$ 600×6 **3,600** 180×2 $3 \times 1,200$

Insert a screenshot of your proposed **new** content.

Substitution Request

3.1 Step In Exploring Multiplication Patterns

What is the same about these quantities? What is different?

$3 \times 4 \text{ ones} = \boxed{} \boxed{} \boxed{} \boxed{1} \boxed{2} \text{ ones}$

$3 \times 4 \text{ tens} = \boxed{} \boxed{} \boxed{} \boxed{1} \boxed{2} \text{ tens} \boxed{0}$

$3 \times 4 \text{ hundreds} = \boxed{} \boxed{} \boxed{} \boxed{1} \boxed{2} \text{ hundreds} \boxed{0} \boxed{0}$

$3 \times 4 \text{ thousands} = \boxed{} \boxed{} \boxed{} \boxed{1} \boxed{2} \text{ thousands} \boxed{0} \boxed{0} \boxed{0}$

What is another way to say the last three products?

What are the different ways you could say the products of these?

$4 \times 6 \text{ tens} = \boxed{}$

$4 \times 6 \text{ hundreds} = \boxed{}$

$4 \times 6 \text{ thousands} = \boxed{}$

Step Up 1. Use a pattern to help you write the products.

$6 \times 2 \text{ ones} = \boxed{12} \text{ ones}$	$6 \times 2 = \boxed{12}$
$6 \times 2 \text{ tens} = \boxed{} \text{ tens}$	$6 \times 20 = \boxed{}$
$6 \times 2 \text{ hundreds} = \boxed{} \text{ hundreds}$	$6 \times 200 = \boxed{}$
$6 \times 2 \text{ thousands} = \boxed{} \text{ thousands}$	$6 \times 2,000 = \boxed{}$

3.1

2. Use a pattern to help you complete these equations.

a.

 $9 \times 4 = \boxed{}$
 $9 \times 40 = \boxed{}$
 $9 \times 400 = \boxed{}$
 $9 \times 4,000 = \boxed{}$

b.

 $8 \times 9 = \boxed{}$
 $8 \times 90 = \boxed{}$
 $8 \times 900 = \boxed{}$
 $8 \times 9,000 = \boxed{}$

c.

 $7 \times 6 = \boxed{}$
 $70 \times 6 = \boxed{}$
 $700 \times 6 = \boxed{}$
 $7,000 \times 6 = \boxed{}$

d.

 $3 \times 7 = \boxed{}$
 $30 \times 7 = \boxed{}$
 $300 \times 7 = \boxed{}$
 $3,000 \times 7 = \boxed{}$

3. Loop all the expressions that have the middle number as the product.

a.

12×20

60×4

240

3×80

400×6

b.

$4 \times 9,000$

600×6

3,600

180×2

$3 \times 1,200$

Step Ahead Write some multiplication expressions to match these products.

a.

2,800

b.

320

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4.B.i Narrative and Activity	Page 154 & 155, Student Journal 7.2 Step Up and discussion https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=154 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=155	Page 58 & 59, SS TX Student Journal 3.2 Step In and Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=58 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=59
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7.2 Using the Partial-Products Strategy to Multiply (Three-Digit Numbers)

Compare these dimensions of two paper strips.

Which strip has the greater area?
How do you know?

How could you figure out the exact area of each strip?
Look at this diagram.

STRIP A
Width = 4 in
Length = 126 in

STRIP B
Width = 7 in
Length = 124 in

4

400 280 28

100 70 6

How has the rectangle been split?
What does each of the red numbers represent?
How could you use the diagram to figure out the total area of Strip A?

You can split a rectangle into parts to find the partial products.

I would add the areas of the smaller rectangles. That's $400 + 280 + 28$. The total area is 704 sq inches.

How could you figure out the exact area of Strip B?

Step Up 1. Figure out each partial product. Then add to figure out the total.

6 × 354

6

300 50 4

b × =
b × =
b × =
Total

154

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2. Write the dimensions around the rectangle. Figure out each partial product. Then add to figure out the total.

a. 4 × 289

b. 7 × 534

c. 6 × 391

Split the rectangle to show 7×307 . Then write number sentences to figure out the total area.

Area

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3.2 Step In Using the Partial-Products Strategy to Multiply Three- and Four-Digit Numbers

Compare these dimensions of two paper strips.

Which strip has the greater area?
How do you know?

How could you figure out the exact area of each strip?
Look at this diagram.

STRIP A
Width – 4 cm
Length – 176 cm

STRIP B
Width – 3 cm
Length – 1,049 cm

How has the rectangle been split?
What does each of the red numbers represent?
How could you use the diagram to figure out the total area of Strip A?

You can split a rectangle into parts to find the partial products.

I would add the areas of the smaller rectangles. That's $400 + 280 + 24$. The total area is 704 sq centimeters.

How could you figure out the exact area of Strip B?

Step Up 1. Figure out each partial product. Then add to figure out the total.

6×354

6

300 50 4

$6 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$6 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$6 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Total $\underline{\hspace{2cm}}$

3.2

2. Write the dimensions around the rectangle. Figure out each partial product. Then add to figure out the total.

a. 4×289

4

200 80 9

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Total $\underline{\hspace{2cm}}$

b. $4 \times 1,795$

4

1,000 700 90 5

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Total $\underline{\hspace{2cm}}$

c. $2 \times 3,208$

2

3,000 200 8

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Total $\underline{\hspace{2cm}}$

Step Ahead Color yellow the part of the rectangle that shows 8×20 . Color blue the part of the rectangle that shows 8×500 . Color red the part of the rectangle that shows $8 \times 3,000$.

8

3,000 500 20 6

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4.B.i Narrative	Page 98, Student Journal 4.10 discussion https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=98	Page 56, SS TX Student Journal 3.1 Step In https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=56
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4.10 Investigating Multiplication Patterns

What is the same about these quantities? What is different?

$3 \times \frac{1}{4}$ ones =				1	2	$\frac{1}{4}$ ones
$3 \times \frac{1}{4}$ tens =				1	2	$\frac{1}{4}$ tens
$3 \times \frac{1}{4}$ hundreds =			1	2	$\frac{1}{4}$ hundreds	0 0
$3 \times \frac{1}{4}$ thousands =	1	2	$\frac{1}{4}$ thousands	0	0	0

What is another way to say the last three products?

What are the different ways you could say the products of these?

$\frac{1}{4} \times 6$ tens =	$\frac{1}{4} \times 6$ hundreds =
$\frac{1}{4} \times 6$ thousands =	

3.1

Step In

Exploring Multiplication Patterns

What is the same about these quantities? What is different?

3×4 ones =

			1	2	ones
--	--	--	---	---	------

3×4 tens =

		1	2	tens	0
--	--	---	---	------	---

3×4 hundreds =

	1	2	hundreds	0	0
--	---	---	----------	---	---

3×4 thousands =

1	2	thousands	0	0	0
---	---	-----------	---	---	---

What is another way to say the last three products?

What are the different ways you could say the products of these?

4×6 tens =

--

4×6 hundreds =

--

4×6 thousands =

--

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4.B.ii Narrative/Activity	Page 18 & 19, Student Journal 1.6 discussion and Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=18 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=19	Page 56, SS TX Student Journal 1.4 Step In and Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=56
Publisher's rationale for the change		
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Publisher's description of the change		
Replacement page involves writing place values as a product x 10 and x 100.		

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1.6 Analyzing Five-Digit Numbers

What do you know about the number shown on this abacus?

Look at the rod that represents the ten-thousands place. How many beads can you see?

What is the total value of the beads in that place? How do you know?



I can see 3 beads in the ten-thousands place. I know that each bead represents 10,000. So $3 \times 10,000 = 30,000$.

38,215 is the same as

$$3 \times 10,000 = 30,000$$

$$8 \times 1,000 = 8,000$$

$$2 \times 100 = 200$$

$$1 \times 10 = 10$$


$$5 \times 1 = 5$$

What is the total value of the beads in each place?

Step Up

1. Look at the abacus. Write the matching number. Then complete the equations to show the value in each place.

a.



$\times 10,000 =$


$\times 1,000 =$

$\times 100 =$

$\times 10 =$

$\times 1 =$

b.



$\times 10,000 =$

$\times 1,000 =$

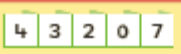
$\times 100 =$

$\times 10 =$

$\times 1 =$

2. Complete the equations to describe the number shown on the expander.

a.



$\times 10,000 =$


$\times 1,000 =$

$\times 100 =$

$\times 10 =$

$\times 1 =$

b.



$\times 10,000 =$


$\times 1,000 =$

$\times 100 =$

$\times 10 =$

$\times 1 =$

c.



$\times 10,000 =$


$\times 1,000 =$

$\times 100 =$

$\times 10 =$

$\times 1 =$

d.



$\times 10,000 =$

$\times 1,000 =$


$\times 100 =$

$\times 10 =$

$\times 1 =$

Step Ahead

Write a five-digit number on the expander. Then ask another student to write the number in expanded form.



Insert a screenshot of your proposed **new** content.

Substitution Request

Step In Writing Six-Digit Numbers Using Expanded Notation

Read the number on the expander.
How would you describe the value of each digit?

5 hundred thousands 6 ten thousands 0 thousands 8 hundreds 1 tens 2 ones

Write the missing numbers to show the number using expanded notation.

() \times 100,000 + () \times 10,000 + () \times 100 + () \times 10 + () \times 1

Which value has not been expanded?

You do not have to expand the value of the zero in the thousands place.

Ashley expanded the same number in a different way.

5(100,000) + 6(10,000) + 8(100) + 1(10) + 2(1)

What is the same about each method?
What is different?

Which method do you prefer? Why?
How would you use Ashley's method to write 704,251 using expanded notation?

Step Up 1. Write the missing numbers to show each six-digit number using expanded notation.

a. 360,712
() \times 100,000 + () \times 10,000 + () \times 100 + () \times 10 + () \times 1

b. 803,649
() \times 100,000 + () \times 1,000 + () \times 100 + () \times 10 + () \times 1

2. Write the number that has been expanded.

a. $(2 \times 100,000) + (4 \times 1,000) + (9 \times 100) + (8 \times 10) + (1 \times 1)$

b. $6(100,000) + 8(10,000) + 6(1,000) + 4(100) + 5(1)$

c. $4(100,000) + 9(1,000) + 5(10)$

3. Write each number using expanded notation.

a. 625,386

b. 190,714

c. 530,500

d. 800,487

Step Ahead These place values have been written in the incorrect order. Figure out and write each number that has been expanded.

a. $(7 \times 10) + (4 \times 100,000) + (1 \times 10,000) + (9 \times 100) + (3 \times 1)$

b. $6(100,000) + 8(1) + 4(10) + 6(1,000)$

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7.6 Using the Partial-Products Strategy to Multiply (Two Two-Digit Numbers)

New turf is being laid in a playground. This diagram shows the dimensions of the playground. Estimate the amount of turf needed.

Jose drew this diagram. What does his diagram show? How did he split the rectangle? What does each red number represent? What is the unknown value? How do you know? How could you figure out the total area of the playground?

Step Up 1. Figure out each partial product. Then write the total of the four products.

30 x 20 = 600

30 x 4 = 120

6 x 20 = 120

6 x 4 = 24

Total = 864

2. Write a multiplication sentence to show each part. Then write the total of the four partial products.

a. 19 x 32

b. 46 x 35

Step Ahead Write the dimensions around the rectangle. Write a multiplication sentence to show each part. Then add the partial products to figure out the total.

28 x 42

Insert a screenshot of your proposed **new** content.

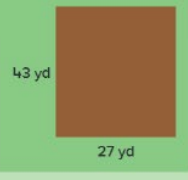
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3.5

Step In Using the Distributive Property to Multiply Two-Digit Numbers (Partial Products)

New turf is being laid in a playground. This diagram shows the dimensions of the playground.

Estimate the amount of turf needed.

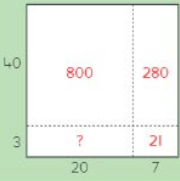


43 yd
27 yd

I know 40×3 is 120. 40×30 is ten times more, so about 1,200 sq yards of turf will be needed.

How could you figure out the exact amount of turf to order?

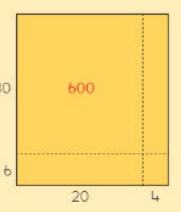
Juliana drew this diagram.



40
3
20
7

800
280
?
21

Step Up 1. Figure out each partial product. Then write the total of the four products.



30
6
20
4

600
20
6
4

36 × 24


30 × 20 = 600
30 × 4 =
6 × 20 =
6 × 4 =
Total

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3.5

2. Write a multiplication sentence to show each part. Then write the total of the four partial products.

a.

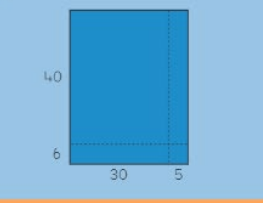


10
30
30
2

19 × 32

× =
× =
× =
× =
Total

b.



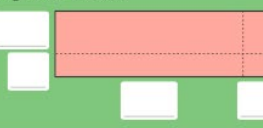
40
6
30
5

46 × 35

× =
× =
× =
× =
Total

Step Ahead

Write the dimensions around the rectangle. Write a multiplication sentence to show each part. Then add the partial products to figure out the total.



28 × 42

× =
× =
× =
× =
Total

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7.4 Using the Partial-Products Strategy to Multiply (Four-Digit Numbers)

Jamal is planning a summer vacation. He buys three package deals to the Grand Canyon. Estimate the total amount that he will pay. Do you think it will be more or less than \$5,000?

How could you figure out the exact cost?

Lara drew this diagram to help her thinking.

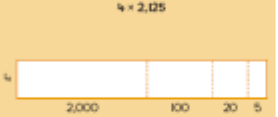


How did she split the rectangle?

Complete the number sentences to show each partial product. Then add the partial products to find the total.

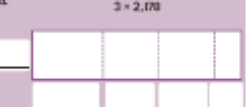
Compose the parts of the rectangle in the diagram to each partial product. Color the part of the rectangle that shows 3×800 .

Step Up 1. Figure out each partial product. Then write the total of the four products.




2. Label the dimensions for each part and write number sentences to figure out each partial product. Then add the partial products to figure out the total.


a. $3 \times 2,178$



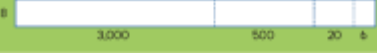
b. $4 \times 1,795$



c. $2 \times 3,208$



Step Ahead Color the part of the rectangle yellow that shows 8×20 . Color the part of the rectangle blue that shows 8×500 . Color the part of the rectangle red that shows $8 \times 3,000$.



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3.2 Step In Using the Partial-Products Strategy to Multiply Three- and Four-Digit Numbers

Compare these dimensions of two paper strips.

Which strip has the greater area?
How do you know?

How could you figure out the exact area of each strip?
Look at this diagram.

STRIP A
Width – 4 cm
Length – 176 cm

STRIP B
Width – 3 cm
Length – 1,049 cm

How has the rectangle been split?
What does each of the red numbers represent?
How could you use the diagram to figure out the total area of Strip A?

You can split a rectangle into parts to find the partial products.

I would add the areas of the smaller rectangles. That's 400 + 280 + 24. The total area is 704 sq centimeters.

How could you figure out the exact area of Strip B?

Step Up 1. Figure out each partial product. Then add to figure out the total.

6×354

6

300

50

4

$6 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$6 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$6 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Total $\underline{\hspace{2cm}}$

3.2

2. Write the dimensions around the rectangle. Figure out each partial product. Then add to figure out the total.

a. 4×289

4

200

80

9

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Total $\underline{\hspace{2cm}}$

b. $4 \times 1,795$

4

1,000

400

90

5

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Total $\underline{\hspace{2cm}}$

c. $2 \times 3,208$

2

3,000

400

16

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$\times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Total $\underline{\hspace{2cm}}$

Step Ahead Color yellow the part of the rectangle that shows 8×20 . Color blue the part of the rectangle that shows 8×500 . Color red the part of the rectangle that shows $8 \times 3,000$.

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7.8 Solving Multi-Step Word Problems Involving Multiplication

The Bay City Tigers need to buy 25 pairs of shorts. How could you figure out the total cost of the shorts? Alex wrote the partial products to figure out the total.

$$\begin{array}{r} 25 \times 38 \\ 20 \times 38 = 760 \\ 5 \times 38 = 190 \\ \hline 25 \times 38 = 950 \end{array}$$

What is the total cost of the shorts? How do you know?

The Mountain Warriors need to buy 12 team shirts and 12 pairs of shorts. What will be the total cost?

I will call the total cost of the shirts and shorts T .
 $T = (95 + 38) \times 12$

Step Up 1. Use the uniform price above. The Cincinnati Chargers need to buy 16 complete uniforms. What is the total cost?

Working Space

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2. Solve these word problems. Show your thinking.

a. Sweaters cost \$39 each. This is \$15 more than the price of a cap. Over the season, 725 caps were sold. What were the total sales from caps?

\$ _____

b. A stadium parking lot has 38 rows. There are 42 spaces in each row. 200 spaces are reserved for staff. How many spaces are there for supporters?

_____ spaces

c. Sports bags cost \$29 each. If this price was reduced by \$3, how much would be saved when buying 24 bags?

\$ _____

d. A team of 18 players bought boots for \$36 and socks for \$9. What was the total cost for the team?

\$ _____

Step Ahead Write a word problem to match this equation. Then figure out the product.

$42 \times 13 =$ _____

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Step In Solving Word Problems Involving Multiplication (Two-Digit Numbers)

The Bay City Tigers need to buy 25 pairs of shorts.

How could you figure out the total cost of the shorts?
Abraham wrote the partial products to figure out the total.

25×27
 $20 \times 20 = 400$
 $20 \times 7 = 140$
 $5 \times 20 = 100$
 $5 \times 7 = 35$

What is the total cost of the shorts? How do you know?

The Mountain Warriors need to buy 12 team shirts and 12 pairs of shorts. What will be the total cost?

I will call the total cost of the shirts and shorts T.
 $T = (35 + 27) \times 12$

Step Up I. Use the uniform prices above. The Cincinnati Chargers need to buy 16 complete uniforms. What is the total cost?

Working Space

\$

2. Solve these word problems. Show your thinking.

a. Sweaters cost \$47 each. This is \$15 more than the price of a cap. 25 of these caps were sold at one game. What was the total amount made in sales from caps?

\$

b. A stadium parking lot has 38 rows. There are 42 spaces in each row. 200 spaces are reserved for staff. How many spaces are there for supporters?

spaces

c. Sports bags cost \$29 each. If this price was reduced by \$3, how much would be saved when buying 24 bags?

\$

d. A club has \$500 to spend. It buys 5 footballs at \$49 each and 3 helmets at \$75 each. How much money is left over?

\$

Step Ahead Write a word problem to match this equation. Then figure out the product.

$42 \times 13 =$

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Replacement lesson involves using the standard algorithm to multiply four-digit numbers.

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7.5 Reinforcing the Partial-Products Strategy for Multiplication (Four-Digit Numbers)

What multiplication expression could you write to match this diagram?


3

2,000 600 70

Write the expression in the boxes below.

\times

How could you figure out the product?
What number sentences would you write?

 Record your thinking in the working space.

Working Space

Step Up 1. Write the multiplication expressions to match. Then use the working space to figure out each product.

a. \times =

1,000 500 60 3

b. \times =

5 2,000 700 20 8

Working Space

2. Write the expressions to match. Then use the working space to figure out each product.

a. \times =

7 1,000 300 50 5

b. \times =

3 6,000 80 9


Working Space

3. Figure out each product. Show your thinking.

a. $2 \times 4,825 =$

b. $6 \times 2,503 =$

Step Ahead Aron figured out $3 \times 3,065$. He added these partial products. Describe his mistake in words.



9,000
1,800
+ 15
10,815

Insert a screenshot of your proposed **new** content.

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Step In Using the Standard Algorithm to Multiply Four-Digit Numbers

Camella needs 4 new laptops for her workplace. She has \$4,500 in her account. Does she have enough money to buy the laptops? What numbers will you multiply to help you decide?

Camella figures out the exact cost like this. What steps did she follow? Write the total cost in the algorithm.

Liam used the standard algorithm for multiplication to calculate the exact cost.

Th	H	T	O
1	0	4	5
x			4
		2	0
	1	6	0
4	0	0	0

Th	H	T	O
1	0	4	5
x			4
		2	0
	1	6	0
4	0	0	0

2. Write your estimate. Then use the standard multiplication algorithm to calculate the exact product.

a. Estimate

Th	H	T	O
1	3	1	2
x			2

b. Estimate

Th	H	T	O
1	0	1	2
x			4

c. Estimate

Th	H	T	O
3	0	3	1
x			3

d. Estimate

Th	H	T	O
2	0	1	6
x			4

e. Estimate

Th	H	T	O
1	6	1	2
x			4

f. Estimate

Th	H	T	O
2	5	4	0
x			3

g. Estimate

Th	H	T	O
3	4	2	5
x			3

h. Estimate

Th	H	T	O
5	7	9	1
x			6

i. Estimate

Th	H	T	O
4	0	3	9
x			6

Step Ahead Write the correct answer. Then describe the mistake in words.

Th	H	T	O
6	0	7	
x			8
5	2	0	6

Write the correct answer. Then describe the mistake in words.

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10.1 Relating Multiplication and Division

What do you know about this rectangle?

How can you figure out the length of the rectangle?

Write two number sentences that you could use to help you.

$\square \times \square = \square$ $\square \div \square = \square$

What do you know about this square rectangle?

What thinking would you use to figure out the length of the unknown side?

What number sentences could you write?

$\square \times \square = \square$ $\square \div \square = \square$

Step Up

1. Complete the two number sentences that you could use to help figure out the unknown dimensions. Then label the diagrams.

a. $\frac{1}{4}$ yd **Area is 20 yd²** \square yd

$\frac{1}{4} \times \square = 20$
 $20 \div \frac{1}{4} = \square$

b. \square ft **Area is 48 ft²** \square ft

$\square \times \square = 48$
 $48 \div \square = \square$

2. Complete each of these.

a. \square m **Area is 63 m²** \square m

$\square \times \square = \square$
 $\square \div \square = \square$

b. **Area is 8 in²** \square in

$\square \times \square = \square$
 $\square \div \square = \square$

c. \square cm **Area is 42 cm²** \square cm

$\square \times \square = \square$
 $\square \div \square = \square$

d. **Area is 27 yd²** \square yd

$\square \times \square = \square$
 $\square \div \square = \square$

3. Figure out the missing number in each fact.

a. $36 \div 9 = \square$ b. $4 \times \square = 12$ c. $1 = \square \div 9$ d. $35 \div \square = 7$

e. $54 \div \square = 9$ f. $\square \div 9 = 9$ g. $30 \div \square = 5$ h. $9 = \square \div 2$

Step Ahead

Write three pairs of possible dimensions for a rectangle that has an area of 600 ft².

$\square \times \square = 600 \text{ ft}^2$
 $\square \times \square = 600 \text{ ft}^2$
 $\square \times \square = 600 \text{ ft}^2$

Working Space

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Step In Relating Multiplication and Division

What do you know about this rectangle?

How can you figure out the length of the rectangle?

Write two number sentences that you could use to help you.

$\square \times \square = \square$

$\square \div \square = \square$

What do you know about this square rectangle?

What thinking would you use to figure out the length of the unknown side?

What number sentences could you write?

$\square \times \square = \square$

$\square \div \square = \square$

Step Up I. Complete the two number sentences that you could use to help figure out the unknown dimension. Then label the diagram.

a. 4 yd **Area is 28 yd^2**

$\square \text{ yd}$

$4 \times \square = 28$

$28 \div 4 = \square$

b. **Area is 48 ft^2** $\square \text{ ft}$

8 ft

$8 \times \square = 48$

$48 \div 8 = \square$

2. Complete each of these.

a. 7 m **Area is 63 m^2**

$\square \text{ m}$

$\square \times \square = \square$

$\square \div \square = \square$

b. **Area is 8 in^2** $\square \text{ in}$

8 in

$\square \times \square = \square$

$\square \div \square = \square$

c. 6 cm **Area is 42 cm^2**

$\square \text{ cm}$

$\square \times \square = \square$

$\square \div \square = \square$

d. **Area is 27 yd^2** 3 yd

$\square \text{ yd}$

$\square \times \square = \square$

$\square \div \square = \square$

3. Figure out the missing number in each fact.

a. $36 \div 9 = \square$

b. $4 = \square \div 8$

c. $1 = \square \div 9$

d. $35 \div \square = 7$

e. $54 \div \square = 9$

f. $\square \div 9 = 9$

g. $30 \div \square = 5$

h. $9 = \square \div 2$

Step Ahead Write three pairs of possible dimensions for a rectangle that has an area of 600 ft^2 .

$\square \times \square = 600 \text{ ft}^2$

$\square \times \square = 600 \text{ ft}^2$

$\square \times \square = 600 \text{ ft}^2$

Working Space

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New reference involves dividing four-digit numbers by one-digit numbers.

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10.4 Using the Partial-Quotients Strategy to Divide (Three-Digit Dividends)

Jamal paid for this laptop in 3 monthly payments. He paid the same amount each month. What amount did he pay each month? How do you know?

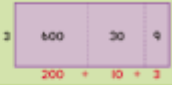


I would break 609 into parts that are easier to divide.

Describe how this rectangle has been split.


What is special about the numbers 600, 30, and 9?

What amount does Jamal pay each month?



Alisa's laptop was \$546. She paid the same amount each month for 6 months. How can you figure out the amount that she paid each month?

It's easier to divide if you think of \$46 as \$4 tens and 6 ones.



Complete the equations to figure out the amount that she paid each month.

Use this strategy to figure out $178 \div 2$.


$540 \div 6 =$ _____

$6 \div 6 =$ _____


$546 \div 6 =$ _____

Step Up 1. These rectangles have been split into parts to make it easier to divide. Divide each part then complete the equation.


a. $606 \div 6 =$ _____




b. $963 \div 3 =$ _____



c. $484 \div 4 =$ _____



d. $530 \div 5 =$ _____



2. Estimate each answer in your head. Then write number sentences to figure out the exact amount.

a. $742 \div 7 =$ _____

b. $648 \div 3 =$ _____

c. $630 \div 6 =$ _____

Step Ahead Write the missing numbers.

a. _____ $\div 4 = 132$

b. _____ $\div 6 = 107$

Working Space

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Step In Using the Partial-Quotients Strategy to Divide (Four-Digit Dividends)

The Hornets have 6,936 members. They have three times as many members as the Wild Cats. How many members do the Wild Cats have?

There must be more than 2,000 members because $6,000 \div 3 = 2,000$.

Hugo wrote these number sentences to figure out the answer. Complete each of the sentences.

How did he break 6,936 into parts that are easier to divide by 3?

Can you think of another way to break 6,936 into parts?

I would group the tens and ones together. $36 \div 3$ is easy to figure out.

6,000 \div 3 =
 900 \div 3 =
 30 \div 3 =
 6 \div 3 =
 6,936 \div 3 =

Step Up I. Break each number into parts you can easily divide by 4.

a. 4,240
 b. 8,016
 c. 3,236

2. Write number sentences to figure out each of these.

a. $3,603 \div 3 =$
 $3,000 \div 3 =$
 $600 \div 3 =$
 $3 \div 3 =$

b. $8,032 \div 4 =$
 $8,000 \div 4 =$
 $32 \div 4 =$

c. $3,930 \div 3 =$
 $3,000 \div 3 =$
 $900 \div 3 =$
 $30 \div 3 =$

d. $4,824 \div 4 =$

e. $9,036 \div 3 =$

f. $5,050 \div 5 =$

g. $6,036 \div 6 =$

h. $5,525 \div 5 =$

i. $1,815 \div 3 =$

Step Ahead Write the missing numbers.

a. \div 4 = 2,106

b. \div 3 = 2,307

Working Space

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4.F.ii Activity	Page 234 & 235, Student Journal 10.6 discussion and Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=234 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=235	Page 280 & 281, SS TX Student Journal 12.5 Step In and Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=280 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=281
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New reference involves using the standard algorithm to divide four-digit numbers by one-digit numbers.

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10.6 Using the Partial-Quotients Strategy to Divide (Four-Digit Dividends)

The Hornets have 6,936 members. They have three times as many members as the Wild Cats. How many members do the Wild Cats have?

There must be more than 2,000 members because $6,000 \div 3 = 2,000$.

James wrote these number sentences to figure out the answer. Complete each of the sentences.

How did he break 6,936 into parts that are easier to divide by 3?

Can you think of another way to break 6,936 into parts?

I would group the tens and ones together. $36 \div 3$ is easy to figure out.

Step Up I. Break each number into parts that are easy to divide by 4.

a. 4,240

b. 8,016

c. 3,236

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2. Write number sentences to figure out each of these.

a. $3,603 \div 3 =$	b. $8,032 \div 4 =$	c. $3,930 \div 3 =$
$3,000 \div 3 =$	$8,000 \div 4 =$	$3,000 \div 3 =$
$600 \div 3 =$	$32 \div 4 =$	$900 \div 3 =$
$3 \div 3 =$		$30 \div 3 =$
d. $4,824 \div 4 =$	e. $9,036 \div 3 =$	f. $5,050 \div 5 =$
g. $6,036 \div 6 =$	h. $5,525 \div 5 =$	i. $1,815 \div 3 =$

Step Ahead Write the missing numbers.

a. $\div 4 = 2,106$

b. $\div 3 = 2,307$

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12.5 Step In Working with the Standard Division Algorithm

A rope of 645 centimeters was cut into three equal parts. How would you figure out the length of each part?

Sara decided to use the standard division algorithm to calculate each length.

What steps has she completed?
What does she need to do next?

Complete Sara's calculation.

H	T	O
2	1	5
3	6	4
-	6	0
	0	4
		3
		1

Four wheels cost \$832. How much does each wheel cost?
Blake followed these steps to figure it out.

8 hundreds divided by 2	3 tens divided by 4	32 ones divided by 4
2 hundreds	2 hundreds + 0 tens	2 hundreds + 0 tens + 8 ones
2 hundreds	2 hundreds + 0 tens	2 hundreds + 0 tens + 8 ones
2 hundreds	2 hundreds + 0 tens	2 hundreds + 0 tens + 8 ones
2 hundreds	2 hundreds + 0 tens	2 hundreds + 0 tens + 8 ones

Rozene and Benjamin each used the standard algorithm.

Rozene

H	T	O
2	0	8
4	8	3
-	8	0
	0	3
		0
		2
		0

Benjamin

H	T	O
2	0	8
4	8	3
-	8	0
	0	3
		2
		0

Compare their calculations.
What do you notice about the steps Benjamin used?
Why do you think he worked with the 3 tens and 2 ones at the same time?
Did this affect the final answer?
How does each method relate to Blake's method?

Five friends ran a carwash. They earned \$285 and split the money evenly.
How much was in each share?
How could you use the standard division algorithm to help you?

12.5 Step Up Complete these calculations using the standard division algorithm.

a.

H	T	O
3	4	8
3		6

b.

H	T	O
4	9	0
4		4

c.

H	T	O
5	4	1
5		5

d.

Th	H	T	O
4	6	1	8
4			4

e.

Th	H	T	O
6	1	8	7
6			2

f.

Th	H	T	O
5	3	2	0
5			5

Step Ahead

Choose two problems above that you can solve easily without using the standard division algorithm. Show your methods.


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4.E Narrative	Page 226, Student Journal 10.2 discussion https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=226	Page 250, SS TX Student Journal 11.2 Step In https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=250
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10.2 Using the Partial-Quotients Strategy to Divide
(Two-Digit Dividends)

Three friends share the cost of this gift.
How can you figure out the amount that each person will pay?

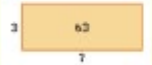




Julia used a sharing strategy.

What do the blocks at the top of the chart represent?
What steps will she follow?
What amount will each person pay? How do you know?
What division sentence could you write?



Nina used a different strategy. She followed these steps.

Step 1	Step 2	Step 3
She drew a rectangle to show the problem. The length of one side becomes the unknown value.	She split the rectangle into two parts so that it was easier to divide by 3.	She thought: $3 \times 20 = 60$ $3 \times 1 = 3$ then $20 + 1 = 21$
		

Why did she split the rectangle into two parts?
Why did she choose the numbers 60 and 3?
Why did she add 20 and 1?

(I'll call the amount that each person pays A .
To find the answer, Julia thinks $60 \div 3 = A$
and Nina thinks $3 \times A = 60$.

How could you use these strategies to figure out $96 \div 3$?

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11.2

Step In

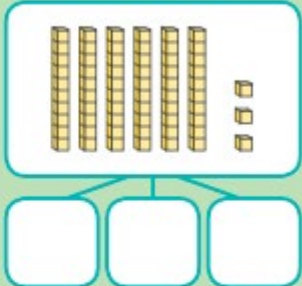
Using the Partial-Quotients Strategy to Divide (Two-Digit Dividends)

Three friends share the cost of this gift.
How can you figure out the amount that each person will pay?



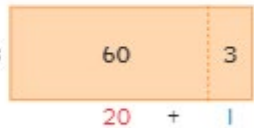


Marcelo used a sharing strategy.

What do the blocks at the top of the chart represent?
What steps will he follow?
What amount will each person pay? How do you know?
What division sentence could you write?




Deana used a different strategy. She followed these steps.

Step 1	Step 2	Step 3
She drew a rectangle to show the problem. The length of one side becomes the unknown value.	She split the rectangle into two parts so that it was easier to divide by 3.	She thought: $3 \times 20 = 60$ $3 \times 1 = 3$ then $20 + 1 = 21$
		

Why did she split the rectangle into two parts?
Why did she choose the numbers 60 and 3?
Why did she add 20 and 1?

I'll call the amount that each person pays **A**.
To find the amount, Marcelo thinks $63 \div 3 = A$
and Deana thinks $3 \times A = 63$.



How could you use these strategies to figure out $96 \div 3$?

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4.F.i Narrative	Page 236, Student Journal 10.7 discussion https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=236	Page 260, SS TX Student Journal 11.7 Step In https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=260
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10.7 Reinforcing the Partial-Quotients Strategy for Division (Four-Digit Dividends)

A beachside apartment costs \$5,236 to rent for four weeks. What is the price of one week?

Would it cost more or less than \$1,000 a week? How do you know?

Ashley wrote these number sentences to figure out the price. Complete each of the sentences.

How did she break 5,236 into parts that are easier to divide by 4?

What is another way to break 5,236 into parts?

Another apartment costs \$1,620 for four weeks rent. What is the price of one week?

You could break 1,620 into parts that are easier to divide by 4. This diagram shows you how.

Complete the sentences.

16 hundreds 20 ones

1,600 ÷ 4 = _____

20 ÷ 4 = _____

1,620 ÷ 4 = _____

Insert a screenshot of your proposed **new** content.

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11.7


Step In Reinforcing the Partial-Quotients Strategy for Division (Four-Digit Dividends)

A beachside apartment costs \$5,236 to rent for 4 weeks.
What is the price of 1 week?
Would it cost more or less than \$1,000 a week? How do you know?

Fatima wrote these number sentences to figure out the price.
Complete each of the sentences.

How did she break 5,236 into parts that are easier to divide by 4?
What is another way to break 5,236 into parts?

Another apartment costs \$1,620 for 4 weeks rent.
What is the price of 1 week?



You could break 1,620 into parts that are easier to divide by 4. This diagram shows you how.

Complete the sentences.

4,000 ÷ 4 = _____

1,200 ÷ 4 = _____

36 ÷ 4 = _____

5,236 ÷ 4 = _____

1,620

16 hundreds

20 ones

1,600 ÷ 4 = _____

20 ÷ 4 = _____

1,620 ÷ 4 = _____

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4.F.ii Narrative	Page 238, Student Journal 10.8 discussion https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=238	Page 280, SS TX Student Journal 12.5 Step In https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=280
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10.8 Solving Word Problems Involving Division

TAKE HOME TODAY!
Buy Now - Pay Later

Imagine you buy one of these items and pay for it over several months.
How would the store figure out the amount you need to pay each month?

Imagine you buy the television and pay equal monthly amounts over six months.
How much would you pay each month?

How could you break 186 into parts that are easy to divide by 6?

Imagine you buy the cell phone and pay equal monthly amounts over six months.
What amount will you pay each month?

Step Up Look at the prices on page 238. Solve these word problems. Show your thinking.

a. Zola buys the cell phone. She pays \$50 first then pays 4 equal monthly payments. How much does she pay each month?

b. Dean buys the laptop and camera. He makes equal monthly payments over 7 months. What amount does he pay each month?

c. Victor buys a camera for his class. He makes equal payments over 5 months. What amount does he pay each month?

d. Shenee buys the cell phone and laptop. She makes equal monthly payments over 6 months. What amount does she pay each month?

Step Ahead Calculate the monthly payments for each phone. Then draw a ☒ beside the plan that you would choose.

A ☐ B ☐ C ☐

each month each month each month

Insert a screenshot of your proposed **new** content.

12.5

Step In Working with the Standard Division Algorithm

A rope of 645 centimeters was cut into three equal parts.
How would you figure out the length of each part?

Sara decided to use the standard division algorithm to calculate each length.

What steps has she completed?
What does she need to do next?

Complete Sara's calculation.

	H	T	O
	2	1	
3	6	4	5
-	6		
	0	4	
-		3	
		1	

Four wheels cost \$832. How much does each wheel cost?

Blake followed these steps to figure it out.

8 hundreds divided by

2 hundreds

2 hundreds

2 hundreds

2 hundreds

3 tens divided by 4

2 hundreds + 0 tens

2 hundreds + 0 tens

2 hundreds + 0 tens

2 hundreds + 0 tens

32 ones divided by 4

2 hundreds + 0 tens + 8 ones

2 hundreds + 0 tens + 8 ones

2 hundreds + 0 tens + 8 ones

2 hundreds + 0 tens + 8 ones

Rozene and Benjamin each used the standard algorithm.

Compare their calculations.

What do you notice about the steps Benjamin used?

Why do you think he worked with the 3 tens and 2 ones at the same time?

Did this affect the final answer?

How does each method relate to Blake's method?

	H	T	O
	2	0	8
4	8	3	2
-	8		
	0	3	
-		0	
		3	2
-		3	2
			0

	H	T	O
	2	0	8
4	8	3	2
-	8		
	0	3	2
-		3	2
			0

Five friends ran a carwash. They earned \$285 and split the money evenly.

How much was in each share?

How could you use the standard division algorithm to help you?

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4.H.i Narrative	Page 130 & 131, Student Journal 6.2 discussion and Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=130 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=131	Page 130 7 131, SS TX Student Journal 6.2 Step In and Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=130 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=131
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Step Up adjusted to better represent multiplication word problems.		

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6.2 Using Tape Diagrams to Make Comparisons Involving Multiplication

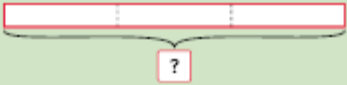
Grace cut two strips of material. The first strip is 2 yards long. The second strip is three times as long as the first strip. What is the length of the second strip?

How do you know?

What multiplication sentence could you write to figure out the length?

Jamal drew this diagram.

First strip: 2 yards

Second strip: 

What does the diagram show?

How could you use the diagram to figure out the length of the second strip?


What numbers could you write in the diagram?


Imagine the second strip was four times as long as the first strip. How could you change the diagram to match?

Step Up 1. Read the problem. Write numbers in the diagram to help figure out the answer. Then complete the equation.

There are 7 red roses in the garden. There are 5 times as many white roses. What is the total number of white roses?


Red: 7

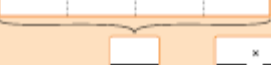
White: 




2. Read each problem. Write numbers in the diagram to help figure out the answer. Then complete the equation.


a. A toy car costs \$9. The train set costs 4 times as much. What is the cost of the train set?


Car: 


Train set: 



b. Three students play soccer. Six times as many students play baseball. How many students play baseball?


Soccer: 

Baseball: 




3. Solve the problem. Then draw a diagram to show your thinking.

There are 2 alligators at a reptile park. There are 4 times as many snakes. What is the total number of snakes?



_____ snakes

Step Ahead Complete each sentence.



a. The stereo costs _____ times as much as the headphones.

b. The _____ costs 4 times as much as the _____.

Insert a screenshot of your proposed **new** content.

Substitution Request

Step In Using Strip Diagrams to Make Comparisons Involving Multiplication

How could you compare the length of these two strips?

5 yards

How long is the longer strip?
How do you know?

I'll call the short strip \$\$. I can figure out the length of the long strip by calculating $3 \times \$$.

Complete this statement.

yards is times as long as yards.

Step Up 1. Color the long strip to match each label.

a.

7 yards

4 times as long

b.

4 yards

6 times as long

c.

9 yards

5 times as long

Step Ahead Draw a diagram to help solve this problem. Then write the answer.

There are 16 cards in each pack. Lorena buys 3 packs on Monday and another 2 packs on Tuesday. How many cards does she buy in total?

2. Write numbers in the diagram to solve the problem. Then write the answer.

a. The old bridge was 15 yards long. The new bridge will be 6 times as long. What will be the length of the new bridge?

Old bridge

15 yards

L = yards

New bridge L

b. Kanti has \$25 in savings. Peter has 5 times as much. How much does Peter have in savings?

Kanti S = \$

Peter S

c. A small plane seats 35 passengers. A large plane seats 4 times as many passengers. What is the seating capacity of the large plane?

Small plane P = passengers

Large plane P

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4.G Narrative	Page 84 & 85, Student Journal 4.3 Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=84 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=85	Page 260 & 261, SS TX Student Journal 11.7 Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=260 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=261
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Step Up Q3 provides an opportunity for students to estimate a quotient before calculating the exact answer.

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Step Up 1. Estimate the difference. Then use the standard subtraction algorithm to calculate the exact difference.

a. Estimate

Th	H	T	O
3	7	1	6
-			
6	1	3	

b. Estimate

Th	H	T	O
4	8	3	9
-			
6	5	4	

c. Estimate

TTh	Th	H	T	O
2	3	7	7	5
-				
5	3	1	6	

Use the information in this table to answer the questions on this page.

	September	October	November
Pine Canyon	7,495	9,030	13,081
Cedar Valley	8,905	13,062	10,306

2. Compare the number of people who visited these national parks. Use the standard subtraction algorithm to calculate the exact difference each month.

September	October	November

3. Use the standard subtraction algorithm to calculate the answers to these.

a. How many more people visited Pine Canyon in November than in October?

b. How many fewer people visited Cedar Valley in September than November?

Insert a screenshot of your proposed **new** content.

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11.7


Step In Reinforcing the Partial-Quotients Strategy for Division (Four-Digit Dividends)

A beachside apartment costs \$5,236 to rent for 4 weeks. What is the price of 1 week? Would it cost more or less than \$1,000 a week? How do you know?

Fatima wrote these number sentences to figure out the price. Complete each of the sentences.

How did she break 5,236 into parts that are easier to divide by 4? What is another way to break 5,236 into parts?

Another apartment costs \$1,620 for 4 weeks rent. What is the price of 1 week?



You could break 1,620 into parts that are easier to divide by 4. This diagram shows you how.

Complete the sentences.

$4,000 \div 4 = \underline{\hspace{2cm}}$
 $1,200 \div 4 = \underline{\hspace{2cm}}$
 $36 \div 4 = \underline{\hspace{2cm}}$
 $5,236 \div 4 = \underline{\hspace{2cm}}$

$1,620$

16 hundreds

20 ones

$1,600 \div 4 = \underline{\hspace{2cm}}$
 $20 \div 4 = \underline{\hspace{2cm}}$
 $1,620 \div 4 = \underline{\hspace{2cm}}$

Step Up 1. Break each number into parts that you can easily divide by 5.

a. $3,550$

_____ hundreds

_____ ones

b. $2,505$

_____ hundreds

_____ ones

c. $1,525$

_____ hundreds

_____ ones

11.7

2. Write number sentences to figure out each of these.

a. $1,720 \div 4 = \underline{\hspace{2cm}}$

$1,600 \div 4 = \underline{\hspace{2cm}}$

$120 \div 4 = \underline{\hspace{2cm}}$

b. $1,659 \div 3 = \underline{\hspace{2cm}}$

$1,500 \div 3 = \underline{\hspace{2cm}}$

$\underline{\hspace{2cm}} \div 3 = \underline{\hspace{2cm}}$

$\underline{\hspace{2cm}} \div 3 = \underline{\hspace{2cm}}$

c. $1,926 \div 6 = \underline{\hspace{2cm}}$

$1,800 \div 6 = \underline{\hspace{2cm}}$

$\underline{\hspace{2cm}} \div 6 = \underline{\hspace{2cm}}$

$\underline{\hspace{2cm}} \div 6 = \underline{\hspace{2cm}}$

3. Estimate each answer in your head. Then write number sentences to figure out the exact amount.

a. $5,612 \div 4 = \underline{\hspace{2cm}}$

b. $8,407 \div 7 = \underline{\hspace{2cm}}$

c. $7,830 \div 6 = \underline{\hspace{2cm}}$

d. $4,650 \div 5 = \underline{\hspace{2cm}}$

e. $4,206 \div 3 = \underline{\hspace{2cm}}$

f. $9,640 \div 8 = \underline{\hspace{2cm}}$

Step Ahead Loop the numbers that you can divide equally by 4.

3,216

4,810

1,720

5,204

5,642

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4.G Activity	Lesson 1.4 Ongoing practice	Page 260 & 261, SS TX Student Journal 11.7 Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=260 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=261
Publisher's rationale for the change		
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Publisher's description of the change		

Substitution Request

Step Up Q3 provides an opportunity for students to estimate a quotient before calculating the exact answer.

Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)

1. Estimate the difference. Then use the standard subtraction algorithm to calculate the exact difference.

a. Estimate _____
H T O
3 6 7
- 4 5

b. Estimate _____
H T O
5 6 3
- 3 8

c. Estimate _____
H T O
4 2 8
- 4 7

d. Estimate _____
H T O
7 3 2
- 5 6


2. On this number line, the distance from 0 to 1 is one whole. Write the fourths in each box above the line. Then write the matching eighth below the line.


0 1 2

1/4 1/4 1/4 1/4

1/8 1/8 1/8 1/8

3. Write or draw the missing parts.

a.  _____
seven thousand _____
Tt. H. T. One

b.  2,804
Tt. H. T. One

Insert a screenshot of your proposed **new** content.

Substitution Request


Step In Reinforcing the Partial-Quotients Strategy for Division (Four-Digit Dividends)

A beachside apartment costs \$5,236 to rent for 4 weeks. What is the price of 1 week? Would it cost more or less than \$1,000 a week? How do you know?

Fatima wrote these number sentences to figure out the price. Complete each of the sentences.

How did she break 5,236 into parts that are easier to divide by 4? What is another way to break 5,236 into parts?

Another apartment costs \$1,620 for 4 weeks rent. What is the price of 1 week?



You could break 1,620 into parts that are easier to divide by 4. This diagram shows you how.

Complete the sentences.

4,000 ÷ 4 = _____

1,200 ÷ 4 = _____

36 ÷ 4 = _____

5,236 ÷ 4 = _____

1,620

16 hundreds

20 ones

1,600 ÷ 4 = _____

20 ÷ 4 = _____

1,620 ÷ 4 = _____

Step Up 1. Break each number into parts that you can easily divide by 5.

a. 3,550

_____ hundreds

_____ ones

b. 2,505

_____ hundreds

_____ ones

c. 1,525

_____ hundreds

_____ ones

2. Write number sentences to figure out each of these.

a. 1,720 ÷ 4 = _____

1,600 ÷ 4 = _____

120 ÷ 4 = _____

b. 1,659 ÷ 3 = _____

1,500 ÷ 3 = _____

_____ ÷ 3 = _____

_____ ÷ 3 = _____

c. 1,926 ÷ 6 = _____

1,800 ÷ 6 = _____

_____ ÷ 6 = _____

_____ ÷ 6 = _____

3. Estimate each answer in your head. Then write number sentences to figure out the exact amount.

a. 5,612 ÷ 4 = _____

b. 8,407 ÷ 7 = _____

c. 7,830 ÷ 6 = _____

d. 4,650 ÷ 5 = _____

e. 4,206 ÷ 3 = _____

f. 9,640 ÷ 8 = _____

Step Ahead Loop the numbers that you can divide equally by 4.

3,216

4,810

1,720

5,204

5,642

SE Breakout(s) and Citation Type(s)	Description of the specific location and hyperlink to the exact location of adopted content	Description of the specific location and hyperlink to the exact location of the proposed new content
Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
4.H.iii Narrative/Activity	Page 70 & 71, Student Journal 3.8 discussion and Step Up https://www.origoslate.com/tx/sjpage?c=1&=en&g=4&p=70 https://www.origoslate.com/tx/sjpage?c=1&=en&g=4&p=71	Page 138 & 139, SS TX Student Journal 6.6 Step In and Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=138 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=139
Publisher's rationale for the change		
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Publisher's description of the change		

Substitution Request

Replacement page provides an opportunity to solve multiplication problems.

Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)

3.8 Consolidating Multiplication Strategies

GATOR TOWN \$35 **Ocean World \$28**

What is the total cost of buying 4 tickets to Gator Town? How do you know?
What are some different strategies you could use to figure out the total cost?

I could halve one factor and double the other. That's 2×10 . Or I could break 28 into two factors and think $4 \times 8 \times 7$.

What is another way you could figure out the total cost?

Evan bought 5 tickets to Ocean World. He paid with two \$100 bills. What change should he be given? How do you know?

I will write T to represent the total cost.
 $T = 5 \times 28$
To figure out his change, I will think $\$100 - T$.

Step Up 1. Imagine you have \$150. Figure out how much you will have left after buying three tickets for each theme park. Show your thinking.

a. **GATOR TOWN \$35** b. **Dream Land \$26** c. **Ocean World \$28**

\$ _____ \$ _____ \$ _____

2. Solve these word problems. Show your thinking.

a. There are 3 rows of 6 seats in each roller coaster car. There are 5 cars. What is the total number of seats?
_____ seats

b. Tina buys 5 t-shirts for \$16 each. She also buys 4 hats for \$12 each. What is the total cost?
\$ _____

c. Alex buys 8 shirts for \$15 each. He uses a \$25 gift card to help pay for the shirts. How much more does he need to pay the total cost?
\$ _____

d. There are 25 fish in each tank. There are 12 tanks. Olivia adds another 2 fish to each tank. What is the total number of fish now?
_____ fish

Step Ahead

The shuttle bus to Dream Land seats 39 people (including the driver). The driver makes 5 trips to Dream Land in the morning. There are no spare seats on each of these trips. How many passengers did he drop to Dream Land in the morning? _____


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Insert a screenshot of your proposed **new** content.

Substitution Request

Step In Using Strip Diagrams to Solve Word Problems

This is a photo of Adan and his family when he was 8 years old. Adan has been circled.



Read the clues and figure out the age of each person in the photo.

CLUE 1 My dad is 10 times as old as my little brother.
 CLUE 2 I am twice as old as my little brother.
 CLUE 3 My dad is 4 years older than my mom.
 CLUE 4 My mom is 4 times older than my sister.
 CLUE 5 My grandpa is 5 years older than the combined age of my mom and dad.

How old is each person in the photo?
 In what order did you use the clues?

Think about the ages of the people in your family. What clues could you write?

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Step Up Write number sentences to solve each word problem. You can draw pictures or diagrams to help your thinking.

a. A concert hall seats 2,450 people. 1,890 tickets have been sold. How many more tickets are available?

tickets

b. Lifen cycles 12 miles each day. Samuel cycles 15 miles each day. How much farther has Samuel cycled after 5 days?

miles

c. Four friends share the cost of a gift. They each pay \$36. How much did the gift cost?

\$

d. It costs \$72 to buy 6 yards of chain. What is the cost of buying 5 yards of the same chain?

\$

Step Ahead Eva spent \$26 on drinks for a party. The cost of the food was 5 times as much as the cost of the drinks.

\$

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4.H.iv Narrative/Activity	Page 238 & 239, Student Journal 10.8 discussion and Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=238 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=239	Page 262 & 263, SS TX Student Journal 11.8 Step In and Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=262 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=263
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Substitution Request

Step Up adjusted to include more problems.

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10.8 Solving Word Problems Involving Division

TAKE HOME TODAY!
Buy Now - Pay Later

Prices: Laptop \$350, TV \$170, Cell Phone \$50, Camera \$80, Headphones \$30

Imagine you buy one of these items and pay for it over several months.
How would the store figure out the amount you need to pay each month?

Imagine you buy the television and pay equal monthly amounts over six months.
How much would you pay each month?

How could you break 106 into parts that are easy to divide by 6?

Imagine you buy the cell phone and pay equal monthly amounts over six months.
What amount will you pay each month?

Step Up Look at the prices on page 238. Solve these word problems. Show your thinking.

a. Zola buys the cell phone. She pays \$50 first then pays 4 equal monthly payments. How much does she pay each month?

b. Dean buys the laptop and camera. He makes equal monthly payments over 7 months. What amount does he pay each month?

c. Victor buys a camera for his class. He makes equal payments over 5 months. What amount does he pay each month?

d. Shenea buys the cell phone and laptop. She makes equal monthly payments over 6 months. What amount does she pay each month?

Step Ahead Calculate the monthly payments for each phone. Then draw a ✓ beside the plan that you would choose.

A. Cell phone \$50, 4 months, \$12.50 each month

B. Cell phone \$50, 7 months, \$7.14 each month

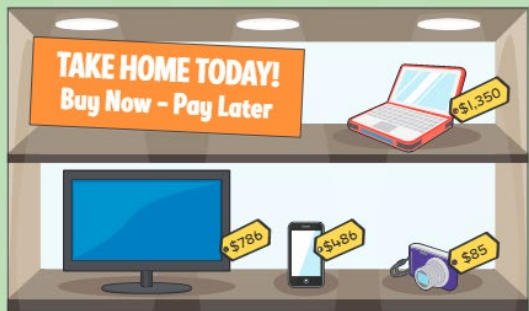
C. Cell phone \$50, 5 months, \$10.00 each month

Insert a screenshot of your proposed **new** content.

Substitution Request

11.8

Step In Solving Word Problems Involving Division



Imagine you buy one of these items and pay for it over several months.
How would the store figure out the amount you need to pay each month?


Imagine you buy the television and pay equal monthly amounts over six months.
How much would you pay each month?

How could you break \$786 into parts that are easy to divide by 6?

Step Up


1. Refer to the prices above. Figure out the equal monthly payments for these items. Show your thinking.

a. 5 monthly payments



\$ _____ each month

b. 6 monthly payments



\$ _____ each month

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11.8

2. Look at the prices on page 262. Solve these word problems. Show your thinking.

a. Ashley buys the cell phone. She pays \$50 first then pays 4 equal monthly payments. How much does she pay each month?

\$ _____

b. Toby buys the laptop and camera. He makes equal monthly payments over 7 months. What amount does he pay each month?

\$ _____

c. David buys 6 cameras for his class. He makes equal payments over 5 months. What amount does he pay each month?


\$ _____

d. Diana buys the cell phone and laptop. She makes equal monthly payments over 6 months. What amount does she pay each month?

\$ _____

Step Ahead Calculate the monthly payments for each phone. Then draw a ✓ beside the plan that you would choose.

A




\$520

paid over 8 months

\$ _____ each month

B




\$847

paid over 7 months

\$ _____ each month

C



\$635

paid over 5 months

\$ _____ each month

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4.D.ii Activity	Module 7 Summative assessment Check Up 1 https://www.origoslate.com/tx/slaunch?c=1&t=resource&i=36895	Page 162 & 163, SS TX Student Journal 11.8 Step In and Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=162 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=163
Publisher's rationale for the change		
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Publisher's description of the change		

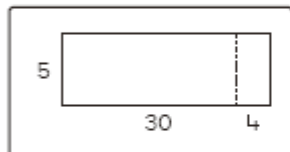
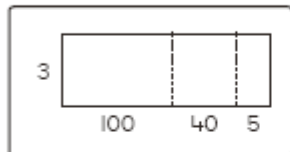
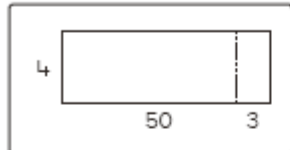
Substitution Request

New reference involves multiplying two-digit numbers by two-digit numbers.

Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)

Check Up |

1. The pictures below show a partial products multiplication strategy. Draw lines to connect each picture to the matching expressions. Some pictures have more than one match. Not all expressions have a match.



$$5 \times (30 + 4)$$

$$150 + 20$$

$$3 \times 40 + 3 \times 5$$

$$53 \times 4$$

$$5 \times 30 + 5 \times 4$$

$$300 + 120 + 15$$

$$4 \times 50 + 4 \times 3$$

2. Solve each problem. Show your thinking.

a. The school baseball team bought 6 new bats for \$43 each and a bucket of balls for \$132. What was the total cost of the bats?

\$ _____

b. The school band bought a bass drum for \$240 and three trumpets for \$147 each. What was the total cost of the trumpets?

\$ _____

Insert a screenshot of your proposed **new** content.

Substitution Request

Step In Solving Word Problems Involving Multiplication (Two-Digit Numbers)

The Bay City Tigers need to buy 25 pairs of shorts.

How could you figure out the total cost of the shorts?

Abraham wrote the partial products to figure out the total.

25×27
 $20 \times 20 = 400$
 $20 \times 7 = 140$
 $5 \times 20 = 100$
 $5 \times 7 = 35$

What is the total cost of the shorts? How do you know?

The Mountain Warriors need to buy 12 team shirts and 12 pairs of shorts. What will be the total cost?

I will call the total cost of the shirts and shorts T.
 $T = (35 + 27) \times 12$

Step Up I. Use the uniform prices above. The Cincinnati Chargers need to buy 16 complete uniforms. What is the total cost?

Working Space

\$

2. Solve these word problems. Show your thinking.

a. Sweaters cost \$47 each. This is \$15 more than the price of a cap. 25 of these caps were sold at one game. What was the total amount made in sales from caps?

\$

b. A stadium parking lot has 38 rows. There are 42 spaces in each row. 200 spaces are reserved for staff. How many spaces are there for supporters?

spaces

c. Sports bags cost \$29 each. If this price was reduced by \$3, how much would be saved when buying 24 bags?

\$

d. A club has \$500 to spend. It buys 5 footballs at \$49 each and 3 helmets at \$75 each. How much money is left over?

\$

Step Ahead Write a word problem to match this equation. Then figure out the product.

$42 \times 13 =$

162

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4.D.iv Narrative	Module 8 Ongoing practice 8.6 https://www.origoslate.com/tx/slaunch?c=1&t=p&age=i=21129	Page 66 & 67, SS TX Student Journal 3.6 Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=66 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=67
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Substitution Request

New reference involves multiplying two-digit numbers by two-digit numbers using the standard algorithm.

Insert a screenshot of your **currently** adopted content. (Click on the blue plus sign at the bottom right corner to add another content change.)

1. Split each mixed number into whole numbers and fractions before adding. Then write the total. Show your thinking.

a. $4\frac{1}{4} + 3\frac{2}{4} =$ _____	b. $3\frac{5}{6} + 2\frac{2}{6} =$ _____	c. $5\frac{6}{8} + 3\frac{5}{8} =$ _____
--	--	--

2. Figure out each product. Show your thinking.

a. $23 \times 47 =$ _____	b. $48 \times 33 =$ _____	c. $34 \times 56 =$ _____
---------------------------	---------------------------	---------------------------

3. Calculate the values and write the matching number on the expander. Then write the number in words.

<p>a.</p> <div> $6 \times 100,000$ 9×100 $4 \times 1,000$ </div>	 _____ _____
<p>b.</p> <div> $3 \times 1,000$ 9×10 $4 \times 100,000$ </div>	 _____ _____

Insert a screenshot of your proposed **new** content.

Substitution Request

Step In Using the Standard Algorithm to Multiply Two-Digit Numbers

A school hall has a rectangular floor. The dimensions are 24 yd × 32 yd.

How would you estimate the area of the floor?
How could you figure out the exact area?

Cary drew this diagram. How will it help him figure out the area of the floor?

Write the partial product inside each part of the diagram.
What is the area? How do you know?

Hailey used the standard multiplication algorithm to calculate the exact area.

Step 1	Step 2	Step 3	Step 4	Step 5
$\begin{array}{r} \text{H T O} \\ \times \quad 24 \\ \hline \end{array}$	$\begin{array}{r} \text{H T O} \\ \times \quad 24 \\ \hline \end{array}$	$\begin{array}{r} \text{H T O} \\ \times \quad 24 \\ \hline \end{array}$	$\begin{array}{r} \text{H T O} \\ \times \quad 24 \\ \hline \end{array}$	$\begin{array}{r} \text{H T O} \\ \times \quad 24 \\ \hline \end{array}$
$\begin{array}{r} \times \quad 24 \\ 32 \\ \hline 8 \end{array}$	$\begin{array}{r} \times \quad 24 \\ 32 \\ \hline 8 \end{array}$	$\begin{array}{r} \times \quad 24 \\ 32 \\ \hline 8 \end{array}$	$\begin{array}{r} \times \quad 24 \\ 32 \\ \hline 8 \end{array}$	$\begin{array}{r} \times \quad 24 \\ 32 \\ \hline 8 \end{array}$

Does it matter which factor is written in the top row? How do you know?
What numbers did she multiply in each step?

Compare the partial-products method and the standard algorithm. How are they similar?

Look carefully at the numbers being multiplied in each step of the algorithm. Where are the matching partial products in Cary's diagram?

What is another way you could figure out the area?

I would break the rectangle into two parts. That's 24 × 3 tens plus 24 × 2.

Step Up A builder made some quick calculations. Make an estimate, then check each calculation and shade the ☐ to show if it is correct or not. If it is not correct, write the correct calculation to the side.

a.

$$\begin{array}{r} 39 \\ \times 41 \\ \hline 39 \\ 156 \\ \hline 195 \end{array}$$

☐ correct
☐ not correct

b.

$$\begin{array}{r} 29 \\ \times 31 \\ \hline 29 \\ 870 \\ \hline 899 \end{array}$$

☐ correct
☐ not correct

c.

$$\begin{array}{r} 26 \\ \times 35 \\ \hline 130 \\ 780 \\ \hline 910 \end{array}$$

☐ correct
☐ not correct

d.

$$\begin{array}{r} 70 \\ \times 61 \\ \hline 70 \\ 3600 \\ \hline 3670 \end{array}$$

☐ correct
☐ not correct

e.

$$\begin{array}{r} 53 \\ \times 27 \\ \hline 371 \\ 1060 \\ \hline 1431 \end{array}$$

☐ correct
☐ not correct

f.

$$\begin{array}{r} 39 \\ \times 62 \\ \hline 78 \\ 234 \\ \hline 302 \end{array}$$

☐ correct
☐ not correct

Step Ahead Look at the algorithm that Hailey used on page 66. Explain why she wrote a zero in the ones place in Step 3.

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4.D.iv Activity	Module 9 Ongoing practice 9.2 https://www.origoslate.com/tx/slaunch?c=1&t=page&i=21198	SS TX Module 4 Ongoing Practice 4.8 https://www.origoslate.com/tx/slaunch?c=2&t=page&i=20882
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Publisher's description of the change		
New reference Q2 involves multiplying two-digit numbers by two-digit numbers using the standard algorithm.		

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Substitution Request

1. Use the standard algorithm to calculate these.

a.
$$\begin{array}{r} 3615 \\ 4072 \\ + 1431 \\ \hline \end{array}$$

b.
$$\begin{array}{r} 2800 \\ 6175 \\ + 3429 \\ \hline \end{array}$$

c.
$$\begin{array}{r} 27482 \\ - 13645 \\ \hline \end{array}$$

d.
$$\begin{array}{r} 35729 \\ - 8375 \\ \hline \end{array}$$

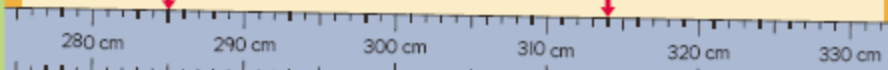
2. Write the missing lengths in meters and centimeters. Then draw lines to show where the other lengths are located on the measuring tape.

 m cm

2 m 93 cm

 m cm

3 m 25 cm

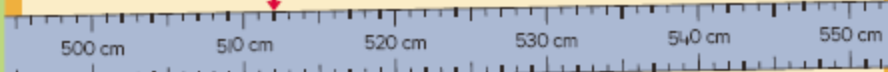


5 m 4 cm

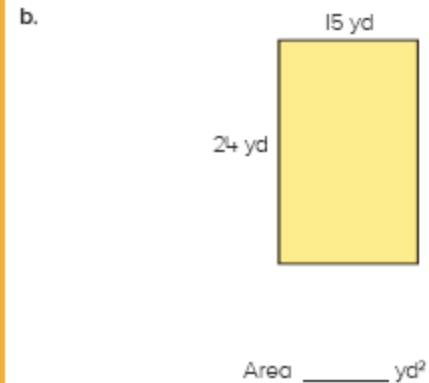
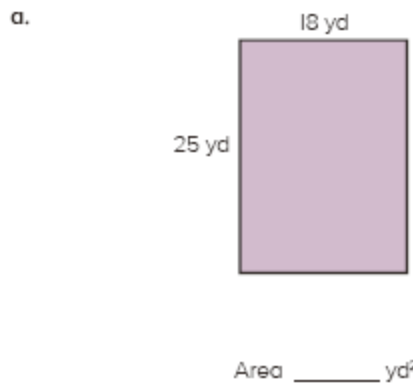
 m cm

5 m 28 cm

 m cm



3. Calculate the area of each rectangle. Show your thinking.



Insert a screenshot of your proposed **new** content.

Substitution Request

4.8

1. Estimate each total. Then use the standard addition algorithm to calculate the exact total.

a. Estimate

$$\begin{array}{r} 1849 \\ + 1109 \\ \hline \end{array}$$

b. Estimate

$$\begin{array}{r} 3581 \\ + 2376 \\ \hline \end{array}$$

c. Estimate

$$\begin{array}{r} 2924 \\ + 2607 \\ \hline \end{array}$$

2. Complete these.

a.

$$\begin{array}{r} 48 \\ \times 23 \\ \hline \end{array}$$

b.

$$\begin{array}{r} 67 \\ \times 29 \\ \hline \end{array}$$

c.

$$\begin{array}{r} 42 \\ \times 64 \\ \hline \end{array}$$

d.

$$\begin{array}{r} 88 \\ \times 53 \\ \hline \end{array}$$

3. Write the matching number or number name.

a. three hundred six million twenty-five thousand nine hundred two

million

thousand

ones

b.

1

2

million

7

5

0

thousand

6

1

9

ones

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Sample: (10)(A)(i) Narrative	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content
4.E, 4.F.i Activity	Module 10 Summative assessment Performance Task 1 https://www.origoslate.com/tx/slaunch?c=1&t=resource&i=36152	SS TX Module 11, Summative Assessment, Performance Task 1 https://www.origoslate.com/tx/slaunch?c=2&t=resource&i=74248

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Publisher's description of the change
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Substitution Request

Performance
Task

A student used a partial quotients strategy to divide 161 by 7. They split 161 into parts then divided the parts separately.

7	140	21
	20	3
	$20 + 3 = 23$	
	(so) $161 \div 7 = 23$	

Use the strategy shown above to calculate the quotient for each of these.
Show your thinking.

a. $96 \div 3 =$

b. $448 \div 4 =$

c. $135 \div 5 =$

d. $2,560 \div 8 =$

Insert a screenshot of your proposed **new** content.

Substitution Request

Performance Task

A student used a partial quotients strategy to divide 161 by 7. They split 161 into parts then divided the parts separately.

7

140
21

20
3

$20 + 3 = 23$
SO $161 \div 7 = 23$

Use the strategy shown above to calculate the quotient for each of these. Show your thinking.

a. $96 \div 3 =$

b. $448 \div 4 =$

c. $135 \div 5 =$

d. $2,560 \div 8 =$

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4.4(F)

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Sample: (10)(A)(i)	Page 5, middle paragraph, 2 nd bullet https://sample.url/for.adopted.content	Page 155, fourth paragraph, under the Activity section https://sample.url/for.proposed.content

Substitution Request

Narrative		
4.F.ii Activity	Module 10 Summative assessment Performance Task 1 https://www.origoslate.com/tx/slaunch?c=1&t=resource&i=36152	SS TX Module 12, Summative Assessment, Performance Task 1 https://www.origoslate.com/tx/slaunch?c=2&t=resource&i=74250
Publisher's rationale for the change		
Page moved to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
New reference involves using the standard algorithm to divide up to 4-digit numbers by 1-digit numbers.		

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Substitution Request

Performance
Task

A student used a partial quotients strategy to divide 161 by 7. They split 161 into parts then divided the parts separately.

7	140	21
	20	3
	$20 + 3 = 23$	
	(so) $161 \div 7 = 23$	

Use the strategy shown above to calculate the quotient for each of these.
Show your thinking.

a. $96 \div 3 =$

b. $448 \div 4 =$

c. $135 \div 5 =$

d. $2,560 \div 8 =$

Insert a screenshot of your proposed **new** content.

Substitution Request

Performance Task

Use the standard division algorithm to calculate each quotient.

<p>a. $684 \div 2 =$ </p>	<p>b. $57 \div 3 =$ </p>	<p>c. $210 \div 6 =$ </p>
<p>d. $6,730 \div 5 =$ </p>	<p>e. $9,057 \div 3 =$ </p>	<p>f. $1,826 \div 4 =$ </p>

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4.NF(E)
4.NF(F)

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Substitution Request

4.H.v Narrative	Teacher notes 7.1 Step 3 https://www.origoslate.com/tx/slaunch?c=1&t=page&i=22554	Page 102, SS TX Student Journal 4.12 Step In https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=102
Publisher's rationale for the change		
Page moved to improve content coherence and content alignment to TEKS.		
Publisher's description of the change		
New reference explores division word problems and interpreting remainders.		

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step 3 teaching the lesson

Project the 4-by-16 rectangular array on the board and ask, What are some ways we can figure out how many small squares are inside the rectangle? Allow time for students to share strategies such as: counting one at a time, skip counting rows, partitioning sections, using the dimensions. Be sure to discuss the advantages and disadvantages of each strategy that is suggested.

Ask, What multiplication sentence describes the total amount of squares?

Project

$4 \times 16 = \underline{\hspace{2cm}}$ on the board and say, We could partition the rectangle to make it easier to find the product of 4×16 . Project the array partitioned into tens and ones. Ask, How can splitting the rectangle this way help us find the product of 4 times 16? Bring out that the number of squares can be found for each section first and then they can be added together to get the total amount of squares in the whole rectangle. Emphasize that the multiplication can be done in parts and the total amount stays the same.

Ask, What multiplication sentence describes the amount in the first section? ($4 \times 10 = 40$.) What multiplication sentence describes the amount in the other section? ($4 \times 6 = 24$.) Record the sentences on the board and ask, How many squares are there in the whole rectangle? How do you know?

Repeat the discussion for finding the number of squares in a 6-by-15 rectangular array.

Project the Step In discussion from Student Journal 7.1 and work through the questions with the whole class. Read the Step Up and Step Ahead instructions with the students. Refer to Question 2 and explain that the diagram shows the rectangle without the individual small squares shown. For Question 2a, emphasize that there are 3 rows of 47. Further emphasize that the first section has 3 rows of 40 and the second section has 3 rows of 7. Encourage students to imagine the rows. (Note: Moving from representing all of the squares with a grid to only labeling the dimensions can be confusing to many students. It cannot be taken for granted that students understand this change in representation. It may not be obvious to them and this change must be explicitly addressed and revisited periodically.) Make sure they know what to do and then have them work independently to complete the task.

Insert a screenshot of your proposed **new** content.

Substitution Request

4.12

Step In Solving Division Word Problems with Remainders

Read each of these problems.

A necklace costs \$75. Fatima makes 6 equal monthly repayments to pay for it. How much does she pay each month?

6 eggs are packed into each carton. There are 75 eggs. How many egg cartons are filled?

75 students go on a camping trip. 6 students sleep in each tent. How many tents are needed?




What is the same about each problem? What is different?

The remainders mean different things in each problem. How do the remainders help you answer each problem?

The remainder in the first problem can be broken up and shared. Fatima pays \$12.50 each month.

The remainder is not required to answer the second problem. The leftover eggs will not fill a carton.

The remainder in the third problem represents a number of students. These students cannot sleep outside, so another tent is needed.

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4.H.v Activity	Page 152 & 153, Student Journal 7.1 Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=152 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=153	Page 102 & 103, SS TX Student Journal 4.12 Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=102 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=103
Publisher's rationale for the change		
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Publisher's description of the change		

Substitution Request

New reference involves solving division word problems and interpreting remainders.

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Step Up 1. Write the dimensions around the grid. Color the tens part blue and the ones part yellow. Write the product for each part then add the products to figure out the area of the grid.

a. 4×17

$4 \times 10 = \underline{\hspace{2cm}}$

$4 \times 7 = \underline{\hspace{2cm}}$

Area $\underline{\hspace{2cm}}$ sq units

b. 6×24

$6 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$6 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Area $\underline{\hspace{2cm}}$ sq units

152

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2. Color the tens part red and the ones part blue. Then write each product. Add the two partial products and write the total.

a. 3×47

$3 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$3 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Total $\underline{\hspace{2cm}}$

b. 7×58

$7 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$7 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Total $\underline{\hspace{2cm}}$

c. 3×64

$3 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$3 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Total $\underline{\hspace{2cm}}$

d. 6×78

$6 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

$6 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Total $\underline{\hspace{2cm}}$

Insert a screenshot of your proposed **new** content.

Substitution Request

4.12

Step In Solving Division Word Problems with Remainders

Read each of these problems.

A necklace costs \$75. Fatima makes 6 equal monthly repayments to pay for it. How much does she pay each month?

6 eggs are packed into each carton. There are 75 eggs. How many egg cartons are filled?

75 students go on a camping trip. 6 students sleep in each tent. How many tents are needed?

What is the same about each problem? What is different?

The remainders mean different things in each problem. How do the remainders help you answer each problem?

The remainder in the first problem can be broken up and shared. Fatima pays \$12.50 each month.

The remainder is not required to answer the second problem. The leftover eggs will not fill a carton.

The remainder in the third problem represents a number of students. These students cannot sleep outside, so another tent is needed.

Step Up 1. Solve each of these word problems. Show your thinking.

a. Sakeem is walking 100 miles for charity. He walks 7 miles each day. How many days will it take to complete the walk?

days

b. 40 tennis balls are packed into cans. There are 3 balls in each can. How many tennis balls are left out?

ball

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4.12

2. Solve each word problem. Show your thinking.

a. 4 friends equally share the cost of a gift that costs \$50. What amount should each friend pay?

\$

b. A roll of plastic wrap is 120 meters long. Roberta cuts the plastic wrap into lengths of 9 meters. How many of these lengths can she cut?

lengths

c. Two couples equally share the cost of a meal. The food costs \$50. The drinks cost \$37. What amount should each couple pay?

\$

d. A roller coaster has 6 cars. Each seats 8 people. 50 people are waiting. How many will have to wait for the next roller coaster?

people

Step Ahead Read the word problem. Then write the number of balls in each bag.

A soccer team has 62 training balls and 5 ball bags. The coach wants about the same number of balls in each bag. How many balls should be in each bag?

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5.B.i Narrative and Activity	Page 30, Student Journal 1.12 discussion and Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=30	Page 26 & 27, SS TX Student Journal 1.10 Step In and Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=26 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=27
Publisher's rationale for the change		
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Publisher's description of the change		

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New reference involves representing word problems with input/output tables.

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1.12 Writing Word Rules for Patterns

Julia is placing a collection of nickels into separate stacks to show a pattern.

How many nickels will she place in the fourth stack?

What is the value of nickels in each of the stacks?

Complete the missing numbers in this table to describe Julia's pattern.

Number of nickels	1	2	3	4	7	10
Total value of nickels	5	10	15			

How did you figure out the value of the nickels in the seventh stack?

Complete this rule to describe what you did.

The total value of each stack is the number of nickels in each stack multiplied by .

Step Up 1. Complete the table below to show the number of shapes and squares for each picture in this pattern.

Picture	Number of shapes	Number of squares
	1	5
	2	

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2. Look at the table in Question 1 on page 30. Write a word rule to show how you could figure out the number of squares when you know the number of shapes.

3. Figure out the number of squares there will be in a picture that has

a. 10 shapes b. 15 shapes c. 20 shapes

4. Figure out the number of shapes there will be in a picture that has

a. 40 squares b. 30 squares c. 50 squares

Step Ahead At a pet store there are many dogs.

DOGGY DAYS PET STORE

1. Complete this table about the dogs.

Number of legs	4	8	12	16	20	24
Number of eyes	2					

2. a. If there are 64 legs, there will be eyes and dogs.
b. How did you figure out these numbers?

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Step In Using Input-Output Tables

A factory cuts circles from sheets of paper to make stickers.

For each sheet of paper they put in a machine they get a certain number of stickers out of it.

This table shows what happens.

Sheets of Paper	1	2	3	4	5	6
Stickers	8	16	24	32	40	48

What equation could you write to describe the process between the number of sheets of paper and the number of stickers produced?

Patterns can be described in a general way by using the words input and output.

Inputs are numbers that you start with.

Outputs are the result of a change to the inputs.

What are the input numbers at the sticker factory?

What are the output numbers at the factory?

Step Up I. A bike factory assembles 60 bikes in 2 hours, 90 bikes in 3 hours, and 120 bikes in 4 hours.

a. If the number of bikes made each hour is the same, how many bikes are made in one hour?

b. Complete the table to figure out how many bikes are assembled in 7 hours.

Hours (Input)	2	3	4	5	6	7
Bikes (Output)	60	90	120			

c. Write an equation to show the process for figuring out the number of bikes made in any number of hours.

Complete the table to help solve each problem.

2. a. There are 100 blocks in 5 boxes, 60 blocks in 3 boxes, and 80 blocks in 4 boxes.

Boxes (Input)					
Blocks (Output)					

b. How many blocks are in 9 boxes?

c. Write an equation to show the process for figuring out the output for any input.

3. a. It costs \$30 to buy 2 tickets, \$50 to buy 4 tickets, and \$120 to buy 8 tickets.

Tickets (Input)					
Cost (Output)					

b. What is the cost of 7 tickets?

c. Write an equation to show the process for figuring out the output for any input.

Step Ahead Look for a pattern to solve this problem.

Red and blue counters are sold together in bags. Jerlene counted the number of red and blue counters in each bag and then wrote the results in this table.

Red Counters	15	25	19	50	35
Blue Counters	17	27	21	52	37

a. Write an equation to show the process for figuring out the number of blue counters for any number of red counters.

b. If there are 60 counters in total, how many counters will be red?

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5.C.i and 5.D.i Narrative and Activity	Page 204 & 205, Student Journal 9.3 discussion and Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=204 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=205	Page 196 & 197, SS TX Student Journal 8.11 Step In and Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=196 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=197
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9.3 Developing a Rule to Calculate the Perimeter of Rectangles


What are the dimensions of this mirror frame?
What do you call the distance around a rectangle?
How could you figure out the perimeter of this mirror frame?


 $12 + 12 + 6 + 6 = 36$ inches

 You could multiply the length and width by 2. Then add them together. That's $2 \times 12 + 2 \times 6$.


What rule could you write to figure out the perimeter of a rectangle?


Step Up 1. Calculate the perimeter of each frame.

a.  10 in
9 in
 $2 \times 10 =$ _____
 $2 \times 9 =$ _____
Perimeter _____ in

b.  7 in
15 in
 $2 \times 7 =$ _____
 $2 \times 15 =$ _____
Perimeter _____ in

2. Calculate the perimeter of these. Show your thinking.

a.  12 in
15 in
Perimeter _____ in


b.  15 in
21 in
Perimeter _____ in


3. Calculate the perimeter of each frame. Show your thinking.


Frame A
Length is 15 in
Width is 8 in
Perimeter _____ in

Frame B
Length is 25 in
Width is 16 in
Perimeter _____ in

Step Ahead Figure out the perimeter of each polygon. For each shape, all sides are the same length.

a.  6 in
Perimeter _____ in

b.  9 in
Perimeter _____ in

c.  5 in
Perimeter _____ in

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Substitution Request

8.11

Step In Developing a Rule to Calculate the Perimeter of Rectangles

What are the dimensions of this mirror frame?
What do you call the distance around a rectangle?
How could you figure out the perimeter of this mirror frame?

$12 + 12 + 6 + 6 = 36$ inches

What is another way you could figure out the perimeter?

You could multiply the length and width by 2. Then add them together. That's $2 \times 12 + 2 \times 6$.

What rule could you write to figure out the perimeter of a rectangle?

Step Up 1. Calculate the perimeter of each frame.

a.

18 in

9 in

$2 \times 18 =$ _____

$2 \times 9 =$ _____

Perimeter _____ in

b.

15 in

7 in

$2 \times 7 =$ _____

$2 \times 15 =$ _____

Perimeter _____ in

8.11

2. Calculate the perimeter of these. Show your thinking.

a.

12 in

18 in

Perimeter _____ in

b.

15 in

21 in

Perimeter _____ in

3. Calculate the perimeter of each rectangle. Show your thinking.

a. Length is 15 in. Width is 8 in.

Perimeter _____ in

a. Length is 25 in. Width is 16 in.

Perimeter _____ in

Step Ahead Figure out the perimeter of each polygon. For each shape, all sides are the same length.

a.

6 in

Perimeter _____ in

b.

9 in

Perimeter _____ in

c.

5 in

Perimeter _____ in

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5.B.i Activity, 5.D.i Narrative and Activity	Page 206 & 207, Student Journal 9.4 discussion and Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=206 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=207	SS TX Teacher notes 8.11 Step 3 and 4 https://www.origoslate.com/tx/slaunch?c=2&t=page&i=21200
Publisher's rationale for the change		
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New reference involves whole group activities involving formulas for the perimeter of rectangles, including a square.

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9.4 Working with Rules to Calculate the Perimeter of Rectangles

How could you figure out the perimeter of this field?

Damon figured out the perimeter like this.

$P = \text{Perimeter}$
 $P = (2 \times L) + (2 \times W)$
 $P = (2 \times 45) + (2 \times 25)$
 $P = 90 + 50$
 $P = 140 \text{ yd}$

What steps did he follow?
How many steps did it take him to calculate the perimeter?

Is there a more efficient way to figure out the perimeter?

You could add the length and width first. Then multiply the total by 2.

$P = 2 \times (L + W)$
 $P = 2 \times (45 + 25)$
 $P = 2 \times 70$
 $P = 140 \text{ yd}$

Step Up 1. Complete the calculation to figure out the perimeter of each rectangle.

a. $P = (2 \times 25) + (2 \times 13)$
 $P = \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$
 $P = \underline{\hspace{1cm}} \text{ yd}$

b. $P = (2 \times 32) + (2 \times 18)$
 $P = \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$
 $P = \underline{\hspace{1cm}} \text{ yd}$

2. Complete these to figure out the perimeter of each rectangle.

a. 43 yd
 28 yd
 $P = 2 \times (43 + 28)$
 $P = 2 \times \underline{\hspace{1cm}}$
 $P = \underline{\hspace{1cm}} \text{ yd}$

b. 73 yd
 19 yd
 $P = 2 \times (73 + 19)$
 $P = 2 \times \underline{\hspace{1cm}}$
 $P = \underline{\hspace{1cm}} \text{ yd}$

3. Calculate the perimeter of each rectangle. Show your thinking.

a. 28 yd
 25 yd
Perimeter $\underline{\hspace{1cm}} \text{ yd}$

b. 54 yd
 14 yd
Perimeter $\underline{\hspace{1cm}} \text{ yd}$

Step Ahead Color the ☐ beside each rule that you could use to calculate the perimeter of a rectangle.

☐ Add all the distances around the sides.
☐ Add the length and width. Then multiply the total by 2.
☐ Multiply the length by the width.

Insert a screenshot of your proposed **new** content.

Substitution Request

step 3 teaching the lesson

- Project the rectangles on the board and distribute the students' copies of the support page and the rulers. Say, *These are the same rectangles that we explored in a previous lesson. You were asked to consider which rectangle was bigger. Do you remember what attribute we used to decide which was bigger? (Area.) What other attributes could we consider? (Length, width, and perimeter.)* Bring out the fact that length, width, and perimeter are all part of the same attribute called "length."
- Direct the students to use their ruler to measure and record the length of each side of the rectangles. Have the students add the side lengths and record the perimeter on the page. Ask, *If you put a string around each rectangle, which string would be longer? Which rectangle has the longest perimeter?* Discuss the perimeters and then ask, *Is there another way the perimeter can be found? What rules could we write to figure out the perimeter of any rectangle?* Invite volunteers to share and explain their rules. Through discussion bring out the rules $P = 2 \times L + 2 \times W$ and $P = 2 \times (L + W)$ and project them on the board. Ensure that the students understand each part of the number sentences and have them test the rules using the rectangles on their support page.
- Project the Step In discussion from Student Journal 8.11 and work through the questions with the whole class. Remind the students that the labels *12 in* and *6 in* represent the length along each whole side of the mirror frame. Read the Step Up and Step Ahead instructions with the students. Make sure they know what to do and then have them work independently to complete the task. As you walk around the room, encourage students to try both rules to find the perimeters in Questions 2 and 3.

step 4 reflecting on the work

Discuss the students' answers to Student Journal 8.11. Refer to Step Ahead section and say, *We have a couple of rules for finding the perimeter of any rectangle. Could we write a rule for finding the perimeter of a square that has all sides the same length?* Encourage students to describe a rule and project $P = 4 \times \textit{side length}$ on the board. Ask, *What is a short way we could write **side length**?* Suggest using the variable S and project the rule $P = 4 \times S$ under the first rule. Repeat the discussion for the triangle ($P = 3 \times S$) and regular hexagon ($P = 6 \times S$).

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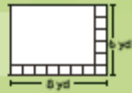
5.B.i, 5.D.ii Activity	Page 200 & 201, Student Journal 9.1 discussion and Step Up https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=200 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=201	Page 192 & 193, SS TX Student Journal 8.9 Step In and Step Up https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=192 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=193
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9.1 Developing a Rule to Calculate the Area of Rectangles

Each small square in this large rectangle measures 1 yard by 1 yard.
What are the dimensions of the large rectangle?




The width is 6 yards and the length is 8 yards.


A short way to write square units is to use a small numeral 2. So, 370 square yards can be written as 370 yd^2 .

How could you use the dimensions to figure out the area of the rectangle?
Does the order in which you multiply matter? Explain.
What rule could you write to calculate the area of any rectangle?


Use your rule to calculate the area of a rectangle that is 7 yards wide and 4 yards long.


Step Up 1. Imagine that each small square inside these large rectangles measures 1 yd by 1 yd. Write the dimensions of the whole rectangles. Then write how you will use the dimensions to calculate the area.

a. 
Length _____ yd Width _____ yd
Area _____ yd^2

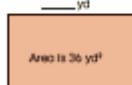
b. 
Length _____ yd Width _____ yd
Area _____ yd^2

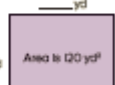
2. Calculate the area of each rectangle. Show your thinking.

a. 
Area _____ yd^2

b. 
Area _____ yd^2

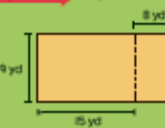
3. Write possible dimensions for each rectangle.

a. 
Area is 36 yd^2

b. 
Area is 120 yd^2

4. Write how you figured out each dimension in Question 3.

Step Ahead Figure out the area of this rectangle. Area _____ yd^2



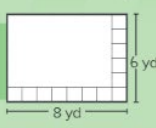
Working Space

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Step In Developing a Rule to Calculate the Area of Rectangles

Each small square in this large rectangle measures 1 yard by 1 yard.
What are the dimensions of the large rectangle?



The width is 6 yards.
The length is 8 yards.

A short way to write square units is to use a small numeral 2. So, 370 square yards can be written as 370 yd².

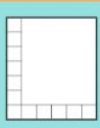
How could you use the dimensions to figure out the area of the rectangle?
Does the order in which you multiply matter? Explain.
What rule could you write to calculate the area of any rectangle?

Use your rule to calculate the area of a rectangle that is 7 yards wide and 9 yards long.

Step Up

I. Imagine that each small square inside these large rectangles measures 1 yd by 1 yd. Write the dimensions of the whole rectangle. Then write how you will use the dimensions to calculate the area.


a.



Length ____ yd Width ____ yd

Area ____ yd²

b.




Length ____ yd Width ____ yd

Area ____ yd²


2. Calculate the area of each rectangle. Show your thinking.

a.



Area ____ yd²

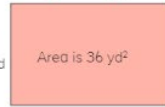
b.



Area ____ yd²


3. Write possible dimensions for each rectangle.

a.



Area is 36 yd²

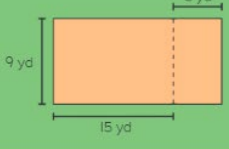
b.



Area is 120 yd²

4. Write how you figured out each dimension in Question 3.

Step Ahead Figure out the area of this rectangle.



Area ____ yd²

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9.2 Working with the Area of Rectangles

This diagram shows the floor area of a room that will be covered with tiles and carpet. The shaded area will be tiled.

How can you figure out the area of floor that will be covered with carpet?

Isabelle figured it out like this.

$$\begin{aligned} 7 \times 10 &= 70 \\ 7 \times 4 &= 28 \\ \text{so } 7 \times 14 &= 98 \text{ m}^2 \\ \text{and } 6 \times 5 &= 30 \text{ m}^2 \\ 98 - 30 &= 68 \text{ m}^2 \end{aligned}$$

Daniel figured it out like this.

$$\begin{aligned} 14 - 6 &= 8 \text{ m} \\ 8 \times 7 &= 56 \text{ m}^2 \\ 7 - 5 &= 2 \text{ m} \\ 2 \times 6 &= 12 \text{ m}^2 \\ 56 + 12 &= 68 \text{ m}^2 \end{aligned}$$

What steps did Isabelle use?
What steps did Daniel use?
Is there another way you could figure out the area?
Which way do you like best? Why?

Step Up 1. Imagine you wanted to lay turf in this barnyard. Write how you would calculate the area.

Area yd²


40 yd


10 yd


20 yd


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2. Calculate the area of each shaded part. Use the working space below.

a. 
Area yd²


b. 
Area yd²

c. 
Area yd²

d. 
Area yd²

Working Space

Step Ahead Calculate the area of the shaded part.


Area yd²

Working Space

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8.10

Step In Working with the Area of Rectangles

This diagram shows the floor area of a room that will be covered with tiles and carpet. The shaded area will be tiled.

How can you figure out the area of floor that will be covered with carpet?

Kamen figured it out like this.

$$7 \times 10 = 70$$

$$7 \times 4 = 28$$

so $7 \times 14 = 98 \text{ m}^2$

and $6 \times 5 = 30 \text{ m}^2$

$$98 - 30 = 68 \text{ m}^2$$

Oscar figured it out like this.

$$14 - 6 = 8 \text{ m}$$

$$8 \times 7 = 56 \text{ m}^2$$

$$7 - 5 = 2 \text{ m}$$

$$2 \times 6 = 12 \text{ m}^2$$

$$56 + 12 = 68 \text{ m}^2$$

What steps did Kamen use?
What steps did Oscar use?
Is there another way you could figure out the area?
Which way do you like best? Why?

Step Up

1. Imagine you wanted to lay turf in this barnyard. Write how you would calculate the area.

Area yd^2

40 yd

10 yd

Barn

Barnyard

20 yd

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8.10

2. Calculate the area of each shaded part. Use the working space below.

a.

30 yd

20 yd

8 yd

11 yd

4 yd

Area yd^2

b.

15 yd

8 yd

4 yd

4 yd

Area yd^2

c.

40 yd

25 yd

15 yd

10 yd

Area yd^2

d.

25 yd

20 yd

5 yd

15 yd

Area yd^2

Working Space

Step Ahead

Calculate the area of the shaded part.

20 yd

16 yd

8 yd

7 yd

6 yd

9 yd

Area yd^2

Working Space

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5.A.ii Activity	Page 166 & 167, Student Journal 7.8 discussion https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=166 https://www.origoslate.com/tx/sjpage?c=1&l=en&g=4&p=167	Page 162 & 163, SS TX Student Journal 7.6 Step In https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=162 https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=163
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7.8 Solving Multi-Step Word Problems Involving Multiplication

The Bay City Tigers need to buy 25 pairs of shorts. How could you figure out the total cost of the shorts? Alex wrote the partial products to figure out the total.

$$\begin{array}{r} 25 \times 38 \\ 20 \times 30 = 600 \\ 20 \times 8 = 160 \\ 5 \times 30 = 150 \\ 5 \times 8 = 40 \end{array}$$

What is the total cost of the shorts? How do you know?

The Mountain Warriors need to buy 12 team shirts and 12 pairs of shorts. What will be the total cost?



I will call the total cost of the shirts and shorts T .
 $T = (45 + 38) \times 12$

Step Up 1. Use the uniform prices above. The Chinook Chargers need to buy 15 complete uniforms. What is the total cost?

Working Space

\$ _____

2. Solve these word problems. Show your thinking.

a. Sweaters cost \$39 each. This is \$15 more than the price of a cap. Over the season, 725 caps were sold. What was the total sales from caps?

\$ _____

b. A stadium parking lot has 38 rows. There are 42 spaces in each row. 200 spaces are reserved for staff. How many spaces are there for supporters?

_____ spaces

c. Sports bags cost \$29 each. If this price was reduced by \$3, how much would be saved when buying 24 bags?

\$ _____

d. A team of 18 players bought boots for \$36 and socks for \$5. What was the total cost for the team?

\$ _____

Step Ahead Write a word problem to match this equation. Then figure out the product.

$$42 \times 13 = \underline{\hspace{2cm}}$$

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1b

Step In Solving Word Problems Involving Multiplication (Two-Digit Numbers)

The Boy City Tigers need to buy 25 pairs of shorts.

How could you figure out the total cost of the shorts?

Abraham wrote the partial products to figure out the total.

25×27
 $20 \times 20 = 400$
 $20 \times 7 = 140$
 $5 \times 20 = 100$
 $5 \times 7 = 35$

What is the total cost of the shorts? How do you know?

The Mountain Warriors need to buy 12 team shirts and 12 pairs of shorts. What will be the total cost?

I will call the total cost of the shirts and shorts T.
 $T = (35 + 27) \times 12$

Step Up I. Use the uniform prices above. The Cincinnati Chargers need to buy 16 complete uniforms. What is the total cost?

Working Space

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7b

2. Solve these word problems. Show your thinking.

a. Sweaters cost \$47 each. This is \$15 more than the price of a cap. 25 of these caps were sold at one game. What was the total amount made in sales from caps?

\$

b. A stadium parking lot has 38 rows. There are 42 spaces in each row. 200 spaces are reserved for staff. How many spaces are there for supporters?

spaces

c. Sports bags cost \$29 each. If this price was reduced by \$3, how much would be saved when buying 24 bags?

\$

d. A club has \$500 to spend. It buys 5 footballs at \$49 each and 3 helmets at \$75 each. How much money is left over?

\$

Step Ahead Write a word problem to match this equation. Then figure out the product. 42 × 13 =

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step 3 teaching the lesson

Project the Step In discussion from Student Journal 7.8 and work through the questions with the whole class. Refer to the Bay City Tigers order and ask, **How would the partial products show on the array? How would we partition the rectangle?** Invite volunteers to write the partial products and the related multiplication sentences on the board.

Ask, **How could we use expanded notation to help us find the partial products?** Invite a confident volunteer to write $(20 + 5) \times (30 + 8)$ on the board and encourage students to describe the necessary multiplications. Highlight how each multiplication would show on an array.

Refer to the equation $T = (45 + 38) \times 12$ in the character dialog box. Highlight how the letter T is used as a variable to represent the total cost of the shirts and shorts. Ask, **Why is it helpful to use a letter as the unknown amount?** Discuss how it is much quicker and easier to write one letter (T) instead of writing 'total cost of the shirts and shorts'. Ask, **Why are 45 and 38 added first before multiplying by 12?** Through discussion, bring out that there would be fewer steps involved compared to multiplying the price of each piece of the uniform by 12. Ask, **What final number needs to be multiplied by 12?** Write 83×12 on the board and have students use both a rectangular array and expanded notation to find the partial products and the total cost (\$996).

Read the Step Up and Step Ahead instructions with the students. Make sure they know what to do and then have them work independently to complete the task.

Insert a screenshot of your proposed **new** content.

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step 3 teaching the lesson

- Project the Step In discussion from Student Journal 7.6 and work through the questions with the whole class. Refer to the Bay City Tigers' order and ask, **How could you figure out the total cost of the shorts? What strategy would you use? Why?** Make sure the students justify their choice of strategy. Elicit observations such as "The double-and-halve strategy is not very helpful because both factors are odd," or "Breaking the factors into pairs of factors will not make the multiplication easier." Settle on a strategy that involves breaking one or both factors into parts that are easier to multiply. Invite volunteers to share their strategies on the board. Step through the partial products that Abraham wrote if the students do not suggest this strategy.
- Repeat the discussion to figure out the total cost of buying 12 team shirts and 12 pairs of team shorts.
- Refer to the equation $T = (35 + 27) \times 12$ in the character dialog box. Highlight how the letter T is used as a variable to represent the total cost of the shirts and shorts. Ask, **Why is it helpful to use a letter as the unknown amount?** Discuss how it is much quicker and easier to write one letter (T) instead of writing "total cost of the shirts and shorts." Ask, **Why are 35 and 27 added first before multiplying by 12?** Through discussion, bring out that there would be fewer steps involved compared to multiplying the price of each piece of the uniform by 12. Ask, **What final number needs to be multiplied by 12?** Write 62×12 on the board and have students use a strategy of their choice to figure out the total cost (\$744). The total cost can then be confirmed with their initial answers.
- Read the Step Up and Step Ahead instructions with the students. Make sure they know what to do and then have them work independently to complete the task.

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5.B.ii Narrative	Teacher notes 1.12 Step 4 https://www.origoslate.com/tx/slaunch?c=1&t=p&age&i=20641	Page 28, SS TX Student Journal 1.11 Step In https://www.origoslate.com/tx/sjpage?c=2&l=en&g=4&p=28
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Replacement page provides a better example of working with number patterns.

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step 4 reflecting on the work

Discuss the students' answers to Student Journal 1.12. Refer to Question 1 and invite individuals to describe or write on the board a rule they used to figure out the number of squares, for example "multiply the number of shapes by 5". Have student identify how the rule can be seen in the pictures and why it makes sense.

Insert a screenshot of your proposed **new** content.

1.11 **Step In** Working with Number Patterns

Awan drew a simple pattern.

How many circles will he draw next?
How do you know?

Awan made a table to show the pattern.

Picture (Input)	1	2	3	4	5	6
Number of Circles (Output)	3	6	9			

Complete the table.
What equation can you write to describe the relationship between the position of the picture and the number of circles?

I could write:
 $\text{Picture} \times 3 = \text{Circles}$
or
 $P \times 3 = C$

Nicole created this number pattern.

20 40 60 80 100 120

She then used the number pattern to create this table.

Position (Input)	1	2	3	4	5	6
Value (Output)	20	40	60	80	100	120

What equation can you write to describe the relationship between the position of the number in the sequence and its value?

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extra practice

preparation

Each pair of students will need:

pattern blocks

activity

Have the students use pattern blocks of the same color (e.g. yellow hexagons) to create the first three parts of a growing pattern. They then draw a table to show the number of blocks and the total number of sides in each part. Students then analyze the numbers to figure out the total number of sides in the fifth, seventh, and tenth parts. Have the students repeat the activity using different blocks.

extra challenge

preparation

None required.

activity

Working in pairs, have each student write a rule for a growing pattern. They then exchange their rules and draw the pattern to match. Repeat as time allows.

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Step In Working with Number Patterns

Awon drew a simple pattern.

How many circles will he draw next?
How do you know?

Awon made a table to show the pattern.

Picture (Input)	1	2	3	4	5	6
Number of Circles (Output)	3	6	9			

Complete the table.

What equation can you write to describe the relationship between the position of the picture and the number of circles?

Nicole created this number pattern. 20 40 60 80 100 120

She then used the number pattern to create this table.

Position (Input)	1	2	3	4	5	6
Value (Output)	20	40	60	80	100	120

What equation can you write to describe the relationship between the position of the number in the sequence and its value?

Step Up 1. a. Write this number pattern into the table.

Position (Input)	1	2	3	4	5	6
Value (Output)	6	12	18	24	30	36

b. What would be the value of the 20th number in the sequence?

2. a. Write this number pattern into the table.

Position (Input)	1	2	3	4	5	6
Value (Output)	12	24	36	48	60	72

b. Write an equation to show the process for figuring out the value of any number in the sequence.

3. For each of these, read the relationship between the position of the number in the sequence and its value. Then complete the table to show the value for each position in the pattern.

a. Position \times 30 = Value

Position (Input)	1	2	7	5	3	10
Value (Output)						

b. Position $+ 6$ = Value

Position (Input)	1		14	9		30
Value (Output)		8			12	

c. Value = Position \times 4

Position (Input)			10	6		
Value (Output)	4	20			80	36

Step Ahead

Akeem is packing jars into boxes. Each box has the same number of jars. She has 15 jars and packs them into 3 boxes. Then she grabs 40 jars and packs them into 8 boxes.

How many boxes will she need to pack 70 jars?
Show your thinking.

Signature:	James Burnett, CEO/Founder
Date Submitted:	2/21/2020