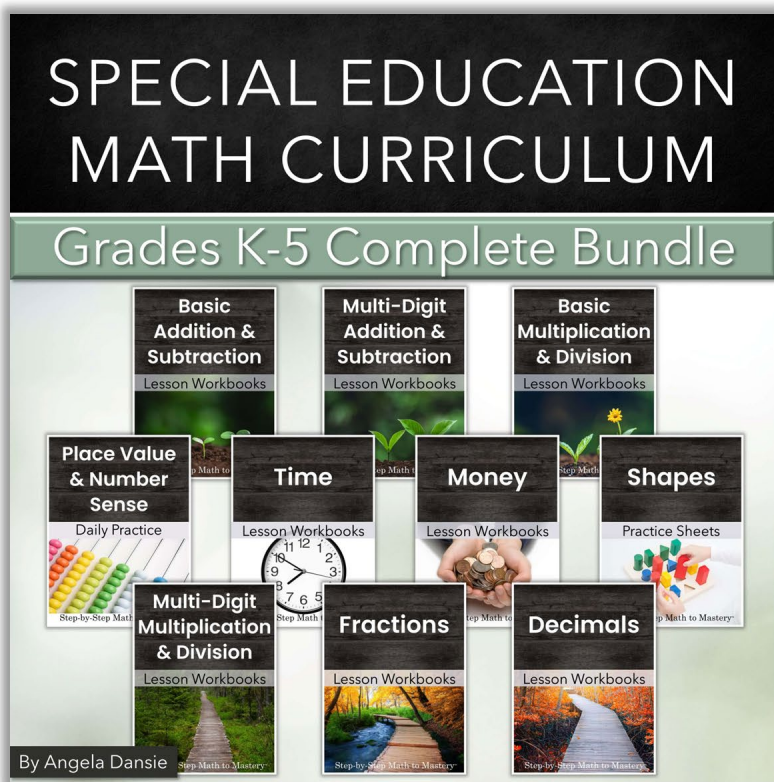


— Step-by-Step —
Math to Mastery
FOR SPECIAL EDUCATION & INTERVENTION

*Preview &
Sample Lessons*



Hello!

I'm excited to show you my updated Step-by-Step Math to Mastery™ resources!

This preview will answer several frequently asked questions and give you a chance to see sample lessons straight from the workbooks.

If you have more questions or would like to request a product catalog don't hesitate to email me.

Angela Dansie

angela@mathtomastery.com

[Skip to Sample Lessons](#)

Have a question? Click to the Answer

Are these resources standards-based? Evidence-based? [ANSWER](#)

Will they be a good fit for my students? [ANSWER](#)

Do students respond well to these lessons? [ANSWER](#)

How do you teach a lesson? [ANSWER](#)

How do you prep and organize materials? [ANSWER](#)

What is the recommended sequence of workbooks? [ANSWER](#)

Can I share this with another teacher? [ANSWER](#)

How can I get a discount? [ANSWER](#)

Standards-Based

K-5th grade standards addressing numbers, addition, subtraction, multiplication, division, fractions, and decimals are covered.

The lesson workbooks are linked to Common Core State Standards so the standards can be referenced when writing IEP goals. Not every math standard is taught. These resources are focused on mastering essential foundational skills in a straightforward way.

An example IEP goal and objectives are included in each lesson workbook, along with the corresponding standard(s).

Evidence-Based

High-Leverage Practices in Special Education found in Step-by-Step Math to Mastery materials include:

- #12 Systematically Design Instruction Towards Learning Goals
- #14 Use Cognitive and Metacognitive Strategies (Schema Instruction)
- #15 Provide Scaffolded Supports
- #16 Use Explicit Instruction

Teacher-directed instruction is explicit and systematic. Skills are broken down into small steps, reducing cognitive load. Lessons progress incrementally from basic to more complex procedures. Clear, precise language is used so teachers and paraeducators can explain model problems simply and consistently.

Word problems are taught using schema-based instruction.

Special Learners

Step-by-Step Math to Mastery™ resources were created for students who need extra support, preferably in a small group or 1-on-1 setting. These lessons have been used in special education classrooms, intervention groups, Title 1 and English language learner programs, after school tutoring, and in homeschools.

Many math books simultaneously introduce two or more problem-solving strategies. This often confuses struggling students. In these lessons, only one strategy is taught at a time for students to master before moving to the next step.

These lessons could benefit all students, especially students who have:

- **Attention difficulties**—minimal visual clutter, short lessons, simple instructions, clear stopping point
- **Learning disabilities**—objectives are carefully sequenced in small chunks with explicit step-by-step instruction and many practice repetitions
- **Slower processing speed**—accuracy is emphasized rather than speed; mastering a skill will increase automaticity
- **Language difficulties**—
Receptive Language: Teacher directions and vocabulary are simple, consistent, and concise.
Expressive Language: Rather than asking students with limited verbal skills to ‘explain their thinking’, teach them how to state the steps they are following.
- **Executive functioning difficulties**—clear expectations and predictable routine, organized layout with white space and fewer problems per page
- **Fine motor issues**—larger font and space for writing answers; students are not asked to write many words or sentences

Student Success

I get feedback from teachers and parents of students in elementary, middle school, and high school. What I love most is hearing about a student's success.

I am using several of these units with a couple of students who experienced prenatal alcohol and drug exposure . . . I **have seen them go from being completely overwhelmed and shut down in math to being excited to show me their progress each day.** I cannot recommend these highly enough!
–Melissa H.

This is hands down the best math resource I have found. My daughter wasn't retaining info from our previous curriculum so we were in need of a new approach. She has actually **retained what she is learning** with this. –Shelly G.

I've been looking for a good math intervention program for my students and this one is awesome! **My students are making so many gains! One of my students felt so successful that he asked for homework!** I liked this so much I got the entire program!
–Jacqueline R.

This resource is amazing!! I have used it with my 3rd grade math intervention groups and my students are actually adding and subtracting with borrowing and regrouping. **I have seen such a huge growth** since using these pages!
–Kelsie L.

I love the **confidence** this gives my students! –Kate S.

Amazing! Used in a resource room and students and their parents kept commenting how they wished the classroom teacher used this program. Highly recommend! –Jennifer M.

My students really enjoy this math. It is easier for them to understand than the curriculum the school is using. They need something very clear and straightforward and this is IT! –Tracey M.

I love the approach and routine to your math units and the multiplication was no exception! **Students with Intellectual Disability were multiplying with pride and parents were very tickled!** Great evidenced-based structure.
–Melissa G.

Simple steps and explanations **helped my ELL students tremendously.** –L. G.

My intervention students have blossomed with using this resource. It is extremely thorough and guides the students through scaffolded steps to achieve competency. Couldn't ask for a better resource! –Lindsey D.

My 4th and 5th grader students with learning disabilities are **finally feeling successful in math!** –Kimberly D.

I used this resource to teach a child from Somalia how to regroup with subtraction. The explicit instruction was instrumental in helping the child conceptualize regrouping. I also appreciate the numerous sheets available for additional practice. Thank you! –Baudelina A.

This was exactly what I was going for. I've been using it all school-year and **I've never seen my kids make progress like they have.** –Danielle D.

Lesson Presentation

There is not just one right way to use the workbooks. They can be adapted to your student needs, your setting, and time constraints.

General guidelines for how to present model problems and prompt student responses are found on the next page.

Here is how I use the lesson workbooks:

My setting is a small group pull-out at the elementary level (mild/moderate). Students sit at a kidney table facing me and a white board behind me.

Warm-up:

- We begin with a number sense & place value warm-up.
- This may include skip counting, missing number flashcards, and a page from a daily practice workbook.

Model: 5 minutes

- I state the lesson objective and write one model problem on the white board at a time and think out loud while I demonstrate each step.
- I ask students to repeat and recite the steps, rules, and vocabulary with me.

Guided Practice: 10 minutes

- During guided practice I continue working problems on the board. I ask students for the next step as if they are coaching me through the problems.
- When they are answering confidently, I often have a student come to the board to work a problem. I've found students enjoy the chance to "be the teacher" and it gives the others a chance to practice being a respectful audience.

Independent Practice: 15 minutes (more or less)

- Students spread out and go to their individual tables/desks where they can focus quietly during this time.
- They work at their own pace, quietly, and raise their hands when finished so I can quickly check their work and give immediate feedback.
- Quick finishers might be given a set of fact flashcards or a fluency timing to practice while the others finish.

When I have a group that is answering accurately and flying at a faster pace, I reduce the number of practice problems and may do two lessons a day.

If we have time, we do a few word problems together or practice telling time or counting money—whatever I'd like to spend a few minutes reviewing.

Keep Students Engaged

"A responding student is a learning student."

Model each skill step-by-step and think out loud while you demonstrate. Give many opportunities for each student to respond during *guided practice*. Don't move to *independent practice* until students are confident with the skill.

Model: Teacher solves problems on the white board or on the paper so everyone can see. Talk through the problem out loud, step by step.

I look at ...

I think ...

I see that ...

I write ...

I remember ...

I say ...

Have students recite the steps and any new rules or vocabulary as you work.

"I add the ones column. What do I do?"

"The rule is ... Say it with me ..."

"(Vocab word) means ... Say that with me ..."

Guided Practice: Teacher and students work problems together. Solve together on the white board, projector or teacher's paper.

1. Start → Teacher models correct response before asking a question
"First we look at the sign. What do we do first, everyone?"
2. Fade to → Whole group choral responses
"What is the next step, everyone?"
3. Fade to → Individual responses
"What numbers are in the tens column, ... Andrew?"
4. Fade to → Solve on individual papers at the same time
Individual responses as you go through the steps together and students write on their papers
"Count back, ... Hailey." "What is the difference, ... Max?" "Everyone write it."

More Options →

- Invite students to come to the board and demonstrate solving problems and talking through the steps. Give each student a chance to be the "teacher" while others practice being a respectful audience.
- Pair students up with a partner. Both solve the same problem, then they quickly compare answers. Or they may take turns demonstrating how to solve a problem while the other watches and checks the answer.

Independent Practice: Students work quietly at their own pace. They may ask for help if needed, but encourage and praise independent work.

Easy to Teach

I know how many things special education teachers have on their plates. It is important to me to make these resources as simple to use as possible.

"I was so scared to buy this [K-5 Math Bundle] because of the price but after 2 months it has **easily saved me that much time** spent after my contracted hours putting things together. I can just **hand it to my paras and they can teach the students without me micromanaging.**" –Whitney H.

The practicality of these units is off the charts!!! They make math time **so much easier for me to plan!!**
–Janelle M.

As a special ed teacher who provides push-in support to students at a variety of levels, your math interventions have been a **lifesaver** this year! I'm able to pinpoint where to start my kids, can **easily align it to the standards**, and I don't end up spending hours sifting through websites online trying to find math work that will fit my kids' needs. Thank you! –Kimberly D.

This is a **godsend for teachers who have to program for a wide range of abilities, simultaneously.** –Juliana R.

I love all of your bundles. They **make doing math a breeze** with my kiddos. It used to take me hours to prep and think of what to do – because I have **four different levels in my classroom**. Now I just follow your curriculum for each different level. Thanks for your great stuff. –Marci G.

This resource is **easy to use for my students and paras.** Thanks! –Rachel W.

I was looking for a resource for my 1st and 2nd grade resource room. General education materials made teaching math cumbersome. I felt like I spent more time teaching the various components of the program and teaching math was secondary. This is just what I needed to **make math manageable** for my special learners. I love that examples are concrete and instruction is direct. Thank you so much!
–Sherri H.

This is a great resource for math rotations. I teach 4-8 AU/ED/ID in a self-contained classroom in a public separate school. My **capable para is able to implement this easily and it is effective** in teaching the students.
–Emily S.

This is an excellent resource for those self-contained special education teachers that have to reinvent the wheel to put together a curriculum to meet the needs of their students that are not low enough to take the alternate assessment.. –Success Beyond the Box Teaching Materials

I can't say enough about this resource. Best I've ever bought from TPT. I have four grades in my classroom, at the same time. **This makes math time stress free, while everyone works on what they need to target.** Thank you!
–Everyday I'm Teaching It

It works perfect for having a para work with the student. –Jennifer B.

Prep & Organize

Once you have decided which lessons to teach, you may want to print and bind individual student workbooks.

1. Print the student booklet cover onto colored cardstock for a bit of durability
2. Print the lesson pages double-sided. Black & white, no color ink needed.
3. Bind the workbook together using what you have (staple, spiral binding, three-hole punched in a binder, or with binder rings)

In my classroom . . .

- I would plan what I would teach the coming month and spend an hour of my prep time printing and assembling student workbooks.
- The method I used was a double-hole-punch at the top, fastening booklets together with two 1" binder rings. I fastened workbooks at the top to avoid anything on the sides interfering with handwriting.
- Each math group had a separate Sterilite™ bin to store the workbooks in as well as any flashcards or base ten blocks or other manipulatives.
- After students finished a workbook I would take the binder rings out and staple the book to send home. Then I re-used the binder rings in the next workbook.

I know these lessons are a lot of pages, and it can be a concern when you are limited in the number of pages you may print and copy. If you live in an area with a print shop it may be worth looking into having them printed there if your school will reimburse you.

Printed coil-bound workbooks are available at mathtomastery.com so you can save your prep time for other things and have professionally printed workbooks delivered to your door. Just another option to consider!

Suggested Sequence

Placement Test

Visit mathtomastery.com to download a free placement test.

Step-by-Step Math to Mastery™ Lesson Workbook Sequence

Basic Addition and Subtraction

- 1. Addition and Subtraction: Numbers to 10
- 2. Addition and Subtraction: Word Problems
- 3. Addition and Subtraction: Three Addends and Teen Numbers
- 4. Addition and Subtraction: Fact Families, Missing Addends, Making Ten

Multi-Digit Addition and Subtraction

- 5. Addition: Two- Three- and Four-Digit Numbers
- 6. Subtraction: Two- Three- and Four-Digit Numbers

Basic Multiplication and Division

- 7. Multiplication: Concepts and Factors to 10
- 8. Division: Concepts and Divisors to 10
- 9. Multiply & Divide: Word Problems, Missing Factors, Fact Families

Multi-Digit Multiplication and Division

- 10. Multiplication: One-Digit by Multi-Digit Factors
- 11. Multiplication: Multi-Digit Factors and Distributive Property
- 12. Division: Long Division with One-Digit Divisors
- 13. Division: Long Division with Two-Digit Divisors

Fractions

- 14. Fractions: Basic Concepts
- 15. Fractions: Representing Fractions on a Number Line
- 16. Fractions: Add and Subtract Like Denominators
- 17. Fractions: Multiply Fractions and Convert to Mixed Numbers
- 18. Fractions: Add and Subtract Unlike Denominators
- 19. Fractions: Divide and Simplify Fractions

Decimals

- 20. Decimals: Read, Write, Compare and Round
- 21. Decimals: Add and Subtract, Multiply and Divide
- 22. Decimals: Convert Between Percent, Decimals, and Fractions

Suggested Sequence

Supporting Resources

Number Sense & Place Value

- Numbers 0 to 20 Count, Read, & Write Numbers
- Numbers 1 to 120 Place Value & Number Sense Daily Practice
- Numbers 120 to 999 Place Value & Number Sense Daily Practice
- Hundreds: Expanded Form, Comparing, & Rounding Off
- Thousands: Expanded Form, Comparing, & Rounding Off

Fact Fluency

- Addition & Subtraction Timings, Flashcards & Games
- Multiplication & Division Timings, Flashcards & Games

Other

- Telling Time to the Nearest 5 Minutes
- Counting Money: Coins and Dollar Bills
- Shapes: Flat and Solid Practice Sheets

These resources may be used alone or with the computation lesson workbooks on the previous page.

Number sense and place value practice sheets are a great daily warm-up routine or entrance activity.

Fact fluency timings: Addition timings may be started after students can add sums to 10. Multiplication timings can begin after students have learned to multiply by 5's, 2's, and 3's.

Telling time and counting money may be taught any time after students are confident skip counting by 5's.

Terms of Use

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FOR SPECIAL EDUCATION & INTERVENTION

Contact Information

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Printed Workbook

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Feedback

I appreciate your feedback. I love to hear about your students' experiences and progress. You can contact me with comments or questions by emailing angela@mathtomastery.com. I do my best to provide error-free materials, but if you find a typo feel free to email and tell me so I can quickly correct it. Thank you for your support!

How to Save

Bundle resources and save at least 20%.

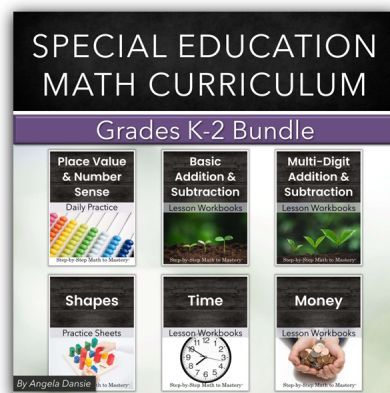
K-2 Math Bundle

15 PDF Resources 2,400+ pages

3 years of math instruction!

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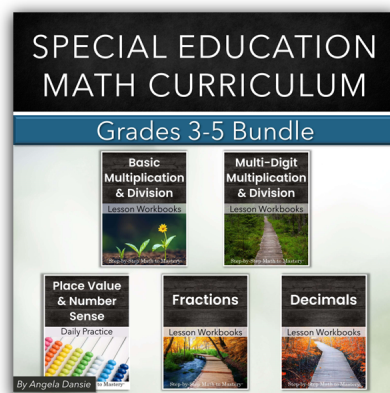
3-5 Math Bundle

17 PDF Resources 2,800+ pages

3 years of math instruction!

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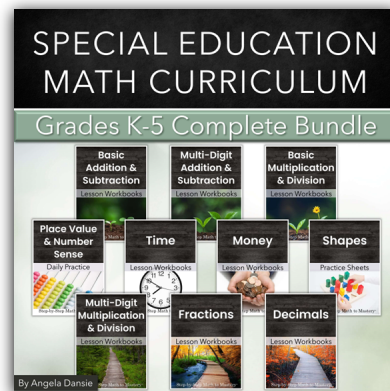
K-5 Math Bundle

All 32 PDF Resources 5,300+ pages

6 years of math instruction!

Digital Download: **\$299**

Save 25% or \$100 off individual prices



Buy the K-5 Math Bundle download for **\$299** and
Get **\$1** off EACH printed workbook you order, for life!

For school district orders or large numbers of licenses, please see the product catalog or email me for a more personalized quote. angela@mathtomastery.com

Sample Lessons

In this sample you will see lessons from these workbooks:

- Add and Subtract Numbers to 10
- Word Problems, Add and Subtract
- Subtraction with Regrouping
- Multiplication Concepts & Factors to 10
- Long Division with One-Digit Divisors
- Fractions: Add and Subtract Like Denominators
- Decimals: Add, Subtract, Multiply, and Divide

A few things to notice as you look at the lessons . . .

Consistent & Predictable Format:

- “I Can” statements at the top of each page state lesson objective
- Model (I do), Guided Practice (We do), Independent Practice (You do)
- Uncluttered. White space and fewer problems on each page

Open and Teach. Paraeducator-Friendly.

- There is no separate lesson plan or teacher manual. The lesson workbook contains all that is needed for both the student and teacher.
- Steps to follow are printed next to each model. These written steps can be used to help the teacher “think out loud” while demonstrating.
- This makes it easy to give to a paraeducator to use. S/he doesn’t need a detailed script because the lessons are formatted to be predictable and simple. Once familiar with the format, adjustments can easily be made to the number of practice repetitions each student needs.

On some pages there may be quite a bit of text. Please realize that the written step-by-step instructions on each page are to help the teacher be clear and consistent during modeling and guided practice, not for the students to read and make sense of independently.

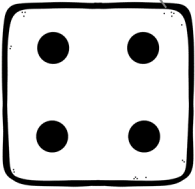
— Step-by-Step —
Math to Mastery
Lesson Workbook

**Add &
Subtract**
Numbers to 10

Name _____

I Can Add +4 Facts

Model Problems:



1. Which is the bigger number? Circle it.
2. Draw dots on the other number.
3. Say the big number.
4. Tap the dots and count up.
5. Write the sum.

$$\begin{array}{r} 4 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 5 \\ \hline \end{array}$$

$$4 + 9 = \underline{\quad}$$

Guided Practice:

$$\begin{array}{r} 4 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 4 \\ \hline \end{array}$$

$$8 + 4 = \underline{\quad}$$

$$4 + 9 = \underline{\quad}$$

$$7 + 4 = \underline{\quad}$$

SAMPLE

Name _____

+4 C

I Can Add +4 Facts

Independent Practice:

Steps:

- Circle the big number
- Draw dots on the other number
- Say the big number
- Tap the dots and count up
- Write the sum

a.

$$\begin{array}{r} 4 \\ + 6 \\ \hline \end{array}$$

b.

$$\begin{array}{r} 4 \\ + 4 \\ \hline \end{array}$$

c.

$$\begin{array}{r} 5 \\ + 4 \\ \hline \end{array}$$

d.

$$\begin{array}{r} 4 \\ + 9 \\ \hline \end{array}$$

e.

$$\begin{array}{r} 7 \\ + 4 \\ \hline \end{array}$$

f.

$$\begin{array}{r} 4 \\ + 8 \\ \hline \end{array}$$

g.

$$5 + 4 = \underline{\quad}$$

h.

$$6 + 4 = \underline{\quad}$$

i.

$$4 + 8 = \underline{\quad}$$

j.

$$4 + 9 = \underline{\quad}$$

Score: _____/10

SAMPLE

Name _____

Addition +4 Doubles

I Can Add Doubles

Model Problems:



$$\begin{array}{r} 4 \\ + 4 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ + 2 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ + 3 \\ \hline \end{array}$$

Doubles, Doubles, Doubles Aren't Troubles

Doubles, Doubles, Doubles Aren't Troubles

$1 + 1 = 2$

bike wheels



$2 + 2 = 4$

on the floor



$3 + 3 = 6$

bee's knees



$4 + 4 = 8$

spider legs



Doubles, Doubles, Doubles Aren't Troubles

Guided Practice:

$$\begin{array}{r} 3 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ + 1 \\ \hline \end{array}$$

$4 + 4 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

$0 + 0 = \underline{\quad}$

$$\begin{array}{r} 2 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 3 \\ \hline \end{array}$$

NAME _____

+4 Doubles

I Can Add Doubles

Independent Practice:

Doubles, Doubles,

a.

b.

Doubles Aren't Troubles

1 + 1 = ___ bike wheels

2 + 2 = ___ on the floor

3 + 3 = ___ bee's knees

4 + 4 = ___ spider legs

$$\begin{array}{r} 4 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 3 \\ \hline \end{array}$$

c.

d.

e.

f.

$$\begin{array}{r} 0 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ + 1 \\ \hline \end{array}$$

g.

h.

$$3 + 3 = \underline{\quad}$$

$$0 + 0 = \underline{\quad}$$

i.

j.

$$2 + 2 = \underline{\quad}$$

$$1 + 1 = \underline{\quad}$$

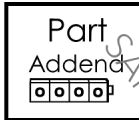
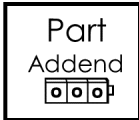
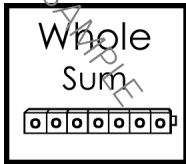
Score: ___/10

SAMPLE

Name _____

I Can Add Related Facts

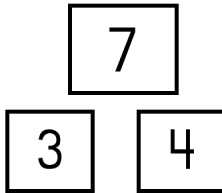
Model Problems:



(Model with Snapping Cubes)

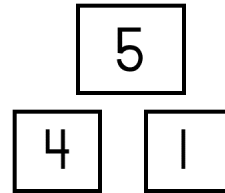
1. The big number is the whole or total (sum)
2. The small numbers are the parts or addends
3. Add the parts together to equal the sum.
4. Then switch the order of the parts and write the related equation.

- When we switch the addends, the sum is the same. Order doesn't matter.
- When equations use the same three numbers, they are related equations. They belong in the same family.



$$\begin{array}{r} 3 \\ \hline \end{array} + \begin{array}{r} 4 \\ \hline \end{array} = \begin{array}{r} 7 \\ \hline \end{array}$$

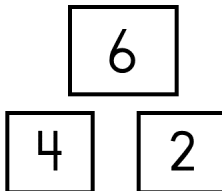
$$\begin{array}{r} 4 \\ \hline \end{array} + \begin{array}{r} 3 \\ \hline \end{array} = \begin{array}{r} 7 \\ \hline \end{array}$$



$$\begin{array}{r} \\ \hline \end{array} + \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$

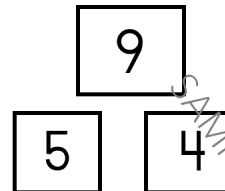
$$\begin{array}{r} \\ \hline \end{array} + \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$

Guided Practice:



$$\begin{array}{r} \\ \hline \end{array} + \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$

$$\begin{array}{r} \\ \hline \end{array} + \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$



$$\begin{array}{r} \\ \hline \end{array} + \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$

$$\begin{array}{r} \\ \hline \end{array} + \begin{array}{r} \\ \hline \end{array} = \begin{array}{r} \\ \hline \end{array}$$

I Can Add Related Facts

Independent Practice:

a.

12	
4	8

_____ + _____ = _____

_____ + _____ = _____

b.

6	
2	4

_____ + _____ = _____

_____ + _____ = _____

c.

7	
3	4

_____ + _____ = _____

_____ + _____ = _____

d.

10	
4	6

_____ + _____ = _____

_____ + _____ = _____

e.

11	
4	7

_____ + _____ = _____

_____ + _____ = _____

f.

9	
5	4

_____ + _____ = _____

_____ + _____ = _____

SAMPLE

Step-by-Step

Math to Mastery

Lesson Workbook

SAMPLE

Addition &

Subtraction

Word Problems

- SAMPLE
- Math Symbols
 - Join or Separate
 - Compare or Combine
 - Whole or Part
- SAMPLE

Name _____

SAMPLE

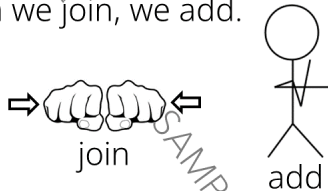
I Can Listen to a Story Problem and Decide to Add or Subtract

Model

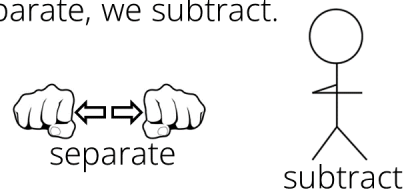
Rules

Listen to these rules. Then say and act them out with me:

When we join, we add.



When we separate, we subtract.



Vocabulary

Today we are listening for the clue words gets and gives away. They can help us decide if the story is about joining or separating.

Join	Separate
Add +	Subtract -
gets	gives away

Listen to this story:

Sam has 3 toy cars. He gets 5 more cars from Andrew. How many cars does he have now?

Which clue did you hear? gets? or gives away?

Yes, "gets" is a joining word.

Say and act out the rule with me, "When we join, we add."

Listen to another story:

Mr. Johnson has 9 pieces of pizza. He gives away 4 pieces to Mrs. Booth. How many pieces of pizza does he have now?

Which clue did you hear? gets? or gives away?

Yes, "gives away" are separating words.

Say and act out the rule with me, "When we separate, we subtract."

I Can Listen to a Story Problem and Decide to Add or Subtract

Model

Listen and follow along while I read this story.

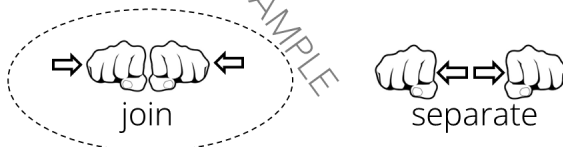
Anthony gets 6 books for his birthday and 4 more books for Christmas. How many books does he have now?

Step 1: What clue did you hear? (gets)

Underline the word gets. (students trace the underline)

Step 2: Is the story about joining or separating? (yes, he had some books from his birthday, and got more to join his collection)

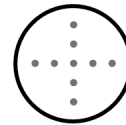
Circle it.



Step 3: Decide to add or subtract.

Act out the rule, "When we join, we add."

Write a plus sign in the circle.



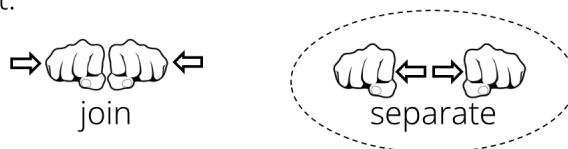
Abby has 3 cookies in her lunchbox. She gives away 2 cookies to Lauren. How many does she have now?

Step 1: What clue did you hear? (gives away)

Underline the words. (students trace the underline)

Step 2: Is the story about joining or separating? (yes, she had some cookies and separated 2 of them out to give away)

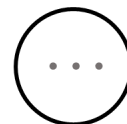
Circle it.



Step 3: Decide to add or subtract.

Act out the rule, "When we separate, we subtract."

Write a minus sign in the circle.



I Can Listen to a Story Problem and Decide to Add or Subtract

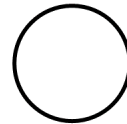
Guided Practice

Steps

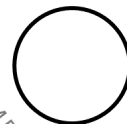
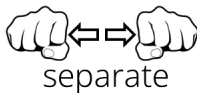
Listen and follow along while I read each story.

1. Underline the clue you hear. What clue did you hear?
2. Circle join or separate. Is the story about joining or separating?
3. Write + or - in the circle. Say the rule (i.e. "When we join, we add.")

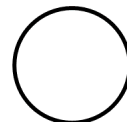
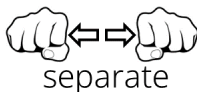
Kaden has 4 old pennies. He gets 2 new shiny pennies.
How many does he have now?



Jack has 8 dimes in his pocket. He gives away 5 dimes to Brooklyn. How many dimes does he end up with?



Alex has 9 nickels. He spends some and gives 4 of them to the cashier. How many does he have now?



I Can Listen to a Story Problem and Decide to Add or Subtract

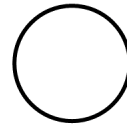
Independent Practice

Steps

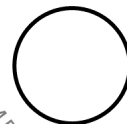
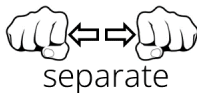
Listen and follow along while I read each story.

1. Underline the clue you hear.
2. Circle join or separate.
3. Write + or - in the circle.

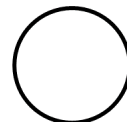
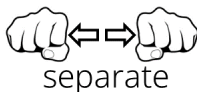
Haley has 5 nickels in her purse. She gives 4 nickels away to Carson. How many nickels does she have now?



Ruby picks 7 red roses. She gives away 3 roses to Clark. How many roses does she end up with?



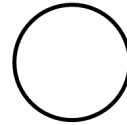
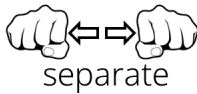
Perry has 2 pumpkins in his garden. He gets 6 more pumpkins from Jack. How many does he end up with?



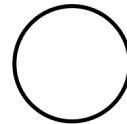
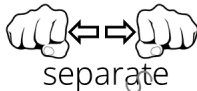
I Can Listen to a Story Problem and Decide to Add or Subtract

Independent Practice

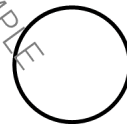
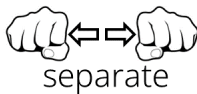
Mrs. Smith has 6 pieces of gum. She gives 5 pieces away to Matthew. How many pieces of gum does she have now?



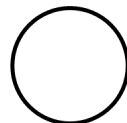
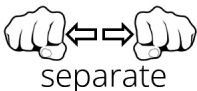
Connor made 9 sandwiches. He gives 6 sandwiches away to his friend Casey. How many sandwiches does he have now?



Ryan has 5 marshmallows in his hot chocolate. He gets 1 more marshmallow from the bag. How many does he have now?



Kim's dog had 4 puppies. She gives away 3 puppies to her friends. How many puppies does she end up with?



SAMPLE

Step-by-Step

Math to Mastery

Lesson Workbook

SAMPLE

Subtraction

SAMPLE

SAMPLE

With Regrouping

SAMPLE

SAMPLE

Name _____

I Can Borrow a Ten When I Subtract

Model:

Tens Ones

$$\begin{array}{r} 3 \ 16 \\ \cancel{4} \ \cancel{0} \\ - 17 \\ \hline 29 \end{array}$$

Tens Ones

$$\begin{array}{r} 25 \\ - 16 \\ \hline \end{array}$$

- Look at the sign. We are subtracting.
- Look at the ones column.
- Is the bigger number on top?
 - Yes. Go ahead and subtract.
 - No. Stop and borrow.
- To Borrow:
 - Go next door. Cross it out. \
 - Write one less above it. -1
 - Come back home. Cross it out. \
 - Write ten more above it. +10
- Subtract the ones column, then the tens.

Guided Practice:

Tens Ones

$$\begin{array}{r} 43 \\ - 26 \\ \hline \end{array}$$

Tens Ones

$$\begin{array}{r} 52 \\ - 9 \\ \hline \end{array}$$

Tens Ones

$$\begin{array}{r} 86 \\ - 37 \\ \hline \end{array}$$

Tens Ones

$$\begin{array}{r} 73 \\ - 48 \\ \hline \end{array}$$

Tens Ones

$$\begin{array}{r} 46 \\ - 18 \\ \hline \end{array}$$

Tens Ones

$$\begin{array}{r} 34 \\ - 27 \\ \hline \end{array}$$

Tens Ones

$$\begin{array}{r} 91 \\ - 26 \\ \hline \end{array}$$

Tens Ones

$$\begin{array}{r} 24 \\ - 5 \\ \hline \end{array}$$

I Can Borrow a Ten When I Subtract

Independent Practice:

Steps:

- Look at the ones. Is the bigger number on top?
 - Yes. Go ahead and subtract.
 - No. Stop and borrow.
- To Borrow:
 - Go next door. Cross it out. \
 - Write one less above it. -1
 - Come back home. Cross it out. \
 - Write ten more above it. +10
- Subtract the ones column, then the tens.

a. Tens Ones

$$\begin{array}{r} 36 \\ - 19 \\ \hline \end{array}$$

b. Tens Ones

$$\begin{array}{r} 35 \\ - 27 \\ \hline \end{array}$$

c. Tens Ones

$$\begin{array}{r} 56 \\ - 18 \\ \hline \end{array}$$

d. Tens Ones

$$\begin{array}{r} 44 \\ - 17 \\ \hline \end{array}$$

e. Tens Ones

$$\begin{array}{r} 73 \\ - 8 \\ \hline \end{array}$$

f. Tens Ones

$$\begin{array}{r} 42 \\ - 24 \\ \hline \end{array}$$

g. Tens Ones

$$\begin{array}{r} 53 \\ - 9 \\ \hline \end{array}$$

h. Tens Ones

$$\begin{array}{r} 65 \\ - 37 \\ \hline \end{array}$$

i. Tens Ones

$$\begin{array}{r} 93 \\ - 35 \\ \hline \end{array}$$

Subtract Three-Digit Numbers: Word Problems

Peter's family owns a pizza place. He helps his parents order ingredients. Help him figure out how much he needs to order.

	4	9	10
	5	0	0
-	2	7	6
<hr/>			
	2	2	4



We need to keep 500 pieces of pepperoni in stock. Right now we only have 276. How many pieces do we need to order?

We need to have 200 mushrooms in stock. We only have 65 right now. How many mushrooms do I need to order?

<hr/>		

We need to have 600 cans of tomatoes. Right now we only have 402. How many cans do I need to order?

<hr/>		

We need to have 400 peppers. Right now we only have 136 peppers. How many do I need to order?

<hr/>		

We need to have 500 olives. Right now we only have 237. How many olives do I need to order?

<hr/>		

Name _____

I Can Subtract Three-Digit Numbers to Solve Word Problems

Independent Practice:

Peter's family owns a pizza place. He orders the ingredients. He needs your help figuring out how much he should buy.

a.

We need to have 300 pieces of bacon. We only have 125 right now. How many pieces of bacon should I order?

b.

We need to have 700 pounds of flour in stock. Right now we have 230 pounds. How many should I order?

c.

We need to have 200 blocks of cheese. We only have 138 right now. How many blocks do I need to order?

d.

We need to have 400 onion slices. We only have 346 now. How many do I need to order?

e.

We need to have 500 ounces of sausage. Right now we have 304. How many should I order?

I Can Borrow Across Two Zeros

Model:

$$\begin{array}{r} 399 \\ 400 \end{array} \begin{array}{r} 13 \\ - \\ \hline \end{array}$$

$$\begin{array}{r} 199 \\ 200 \end{array} \begin{array}{r} 15 \\ - \\ \hline \end{array}$$

What happens when I go next door to borrow, but there is a zero there?

Keep walking until you get to a digit that is not a zero.

- Cross out that digit and the zeros behind it
- Write one less above them
 - For example, if you crossed out 400, write 399 above it.
- Come back home. Cross it out. \
- Write ten more above it. +10

Guided Practice:

"Minus 1" and write the number above the digits that were borrowed from.

$$\begin{array}{r} \square \\ 800 \end{array} \begin{array}{r} 11 \\ - \\ \hline \end{array}$$

$$\begin{array}{r} \square \\ 600 \end{array} \begin{array}{r} 13 \\ - \\ \hline \end{array}$$

$$\begin{array}{r} \square \\ 900 \end{array} \begin{array}{r} 12 \\ - \\ \hline \end{array}$$

$$\begin{array}{r} \square \\ 700 \end{array} \begin{array}{r} 18 \\ - \\ \hline \end{array}$$

$$\begin{array}{r} \square \\ 300 \end{array} \begin{array}{r} 17 \\ - \\ \hline \end{array}$$

$$\begin{array}{r} \square \\ 500 \end{array} \begin{array}{r} 14 \\ - \\ \hline \end{array}$$

$$\begin{array}{r} \square \\ 300 \end{array} \begin{array}{r} 14 \\ - \\ \hline \end{array}$$

$$\begin{array}{r} \square \\ 200 \end{array} \begin{array}{r} 15 \\ - \\ \hline \end{array}$$

$$\begin{array}{r} \square \\ 400 \end{array} \begin{array}{r} 16 \\ - \\ \hline \end{array}$$

I Can Borrow Across Two Zeros

Independent Practice:

"Minus 1" and write the number above the digits that were borrowed from.

$\begin{array}{r} \square \quad 14 \\ \cancel{2004} \end{array}$	$\begin{array}{r} \square \quad 18 \\ \cancel{4008} \end{array}$	$\begin{array}{r} \square \quad 11 \\ \cancel{6001} \end{array}$
$\begin{array}{r} \square \quad 17 \\ \cancel{3007} \end{array}$	$\begin{array}{r} \square \quad 15 \\ \cancel{2005} \end{array}$	$\begin{array}{r} \square \quad 16 \\ \cancel{8006} \end{array}$
$\begin{array}{r} \square \quad 15 \\ \cancel{4005} \end{array}$	$\begin{array}{r} \square \quad 14 \\ \cancel{5004} \end{array}$	$\begin{array}{r} \square \quad 19 \\ \cancel{7009} \end{array}$
$\begin{array}{r} \square \quad 13 \\ \cancel{6003} \end{array}$	$\begin{array}{r} \square \quad 17 \\ \cancel{8007} \end{array}$	$\begin{array}{r} \square \quad 12 \\ \cancel{9002} \end{array}$
$\begin{array}{r} \square \quad 16 \\ \cancel{5006} \end{array}$	$\begin{array}{r} \square \quad 18 \\ \cancel{7008} \end{array}$	$\begin{array}{r} \square \quad 11 \\ \cancel{3001} \end{array}$

Add or Subtract?

Kent bought a bike for 723 dollars. A bike rack for his car cost 364 dollars. How much did he pay for both the bike and rack?

_____ dollars

I am looking for:

- the whole total, so I add +
- a part, so I subtract -

Carrie wants to buy a bike that costs 817 dollars. She has earned 230 dollars so far. How much does she have left to earn before she can buy the bike?

_____ dollars

I am looking for:

- the whole total, so I add +
- a part, so I subtract -

SAMPLE

Step-by-Step

Math to Mastery

Lesson Workbook

SAMPLE

Multiply

- Equal Groups
- Repeated Addition
- Area Grid
- Skip Counting
- Commutative Property
- Multiply by One
- Multiply by Zero
- Multiply vs. Add
- Times Table Charts

Name _____

SAMPLE

Name _____

I Can Use Multiplication to Describe an Array

Model:

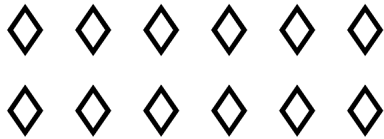
1 ♥ ♥ ♥ ♥
 2 ♥ ♥ ♥ ♥
 3 ♥ ♥ ♥ ♥
 4 ♥ ♥ ♥ ♥
 5 ♥ ♥ ♥ ♥
 6 ♥ ♥ ♥ ♥
 1 2 3 4

6 rows, 4 in each row
6 × 4 hearts = 24

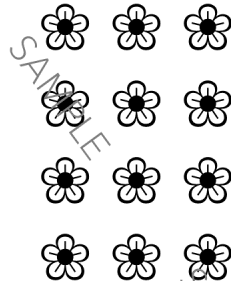
An array is a group of objects organized into rows and columns. Today you will use multiplication to show how many are in the array.

1. Point to the object in the top left corner. Count the rows and write the number in the first blank.
2. Point to the object in the bottom left corner. Count the columns and write the number in the next blank.
3. To write the multiplication equation, write the number of rows in the first blank, *times* the number in each row in the second blank.
4. Count the pictures to find the total.

Guided Practice:



_____ rows, _____ in each row
 _____ × _____ diamonds = _____



_____ rows, _____ in each row
 _____ × _____ flowers = _____

SAMPLE

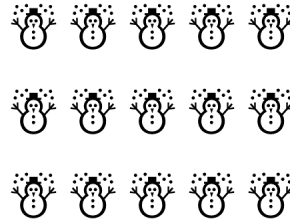
Name _____

I Can Use Multiplication to Describe an Array

Independent Practice:

- Point to the object in the top left corner. Count the rows and write the number in the first blank.
- Point to the object in the bottom left corner. Count the columns and write the number in the next blank.
- To write the multiplication equation, write the number of rows in the first blank, *times* the number in each row in the second blank.
- Count the pictures to find the total.

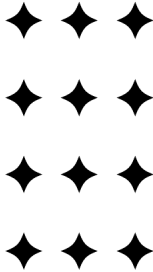
a.



_____ rows, _____ in each row

_____ × _____ snowmen = _____

b.



_____ rows, _____ in each row

_____ × _____ diamonds = _____

c.



_____ rows, _____ in each row

_____ × _____ hearts = _____

d.



_____ rows, _____ in each row

_____ × _____ stars = _____

e.



_____ rows, _____ in each row

_____ × _____ airplanes = _____

SAMPLE

Name _____

I Can Multiply to Solve Word Problems

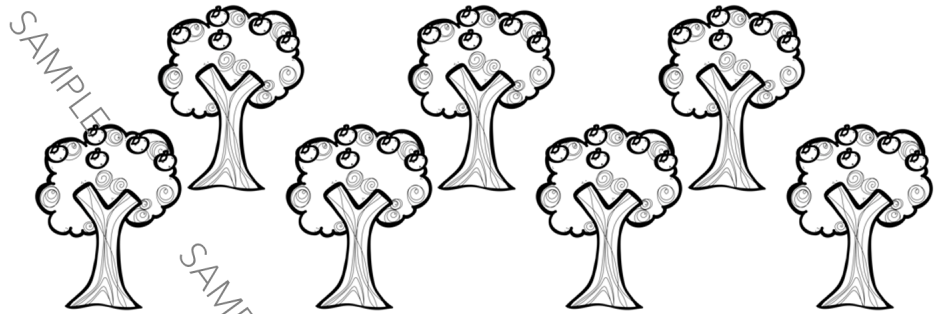
Vocabulary:

Watch for the word "each". It often means you need to multiply.

Model:

There are 7 trees in the orchard. Each tree has 5 apples. How many apples are there altogether?

$$\begin{array}{r}
 7 \\
 \times 5 \\
 \hline
 35
 \end{array}$$



Guided Practice:

There are 5 trees in the orchard. Each tree has 8 apples. How many apples are there total?

$$\begin{array}{r}
 \square \\
 \times \square \\
 \hline
 \square
 \end{array}$$

There are 6 pear trees in the orchard. Each pear tree has 2 pears. How many pears are there altogether?

$$\begin{array}{r}
 \square \\
 \times \square \\
 \hline
 \square
 \end{array}$$

There are 2 apricot trees in my yard. Each tree has 8 apricots. How many apricots are there in all?

$$\begin{array}{r}
 \square \\
 \times \square \\
 \hline
 \square
 \end{array}$$

There are 9 lemon trees. Each tree has 5 lemons. How many lemons are there total?

$$\begin{array}{r}
 \square \\
 \times \square \\
 \hline
 \square
 \end{array}$$

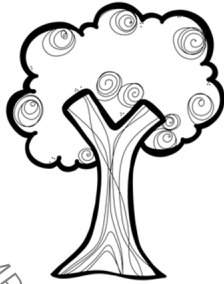
Name _____

I Can Multiply to Solve Word Problems

Independent Practice:

The fruit is ripe!

Find out how many pieces of fruit need to be picked.



a.

There are 2 fig trees. Each fig tree has 3 figs. How many are there altogether?

X	

b.

There are 5 lime trees. Each one has 4 limes on it. How many limes are there in all?

X	

c.

4 plum trees grow in the orchard. Each tree has 2 plums. How many plums are there total?

X	

d.

6 orange trees are in the orchard. Each tree has 5 oranges. How many oranges are there?

X	

e.

There are 2 cherry trees growing. Each tree has 7 cherries. How many cherries are there?

X	

f.

There are 5 olive trees. Each olive tree has 2 olives on it. How many olives are there altogether?

X	

g.

9 pear trees grow in the orchard. Each one has 2 pears on it. How many pears are there in all?

X	

SAMPLE

Step-by-Step

Math to Mastery

Lesson Workbook

SAMPLE

Division

SAMPLE

- SAMPLE
- Division with Remainders
 - Long Division with One-Digit Divisors
- SAMPLE

SAMPLE

Name _____

SAMPLE

SAMPLE

Name _____

Remainders Lesson 5

I Can Divide by 3 with a Remainder

Write the multiples of 3.

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10

Model:

$$\begin{array}{r} 3 \overline{)14} \\ - \quad _ \end{array}$$

Steps:

1. Read the problem. “__ goes into __”
2. Ask, does it go in evenly?
3. Count back until you reach a multiple.
4. Divide into the multiple. Write the quotient above.
5. Multiply. Write the product below.
6. Subtract. Write the remainder.

Guided Practice:

$$\begin{array}{r} 3 \overline{)22} \\ - \quad _ \end{array}$$

$$\begin{array}{r} 3 \overline{)10} \\ - \quad _ \end{array}$$

$$\begin{array}{r} 3 \overline{)2} \\ - \quad _ \end{array}$$

$$\begin{array}{r} 3 \overline{)29} \\ - \quad _ \end{array}$$

$$\begin{array}{r} 3 \overline{)5} \\ - \quad _ \end{array}$$

$$\begin{array}{r} 3 \overline{)15} \\ - \quad _ \end{array}$$

SAMPLE

Name _____

Remainders Lesson 5

I Can Divide by 3 with a Remainder

Independent Practice:

Write the multiples of 3.

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10

$$\begin{array}{r} 3 \overline{)28} \\ - \underline{\quad} \end{array}$$

$$\begin{array}{r} 3 \overline{)20} \\ - \underline{\quad} \end{array}$$

$$\begin{array}{r} 3 \overline{)7} \\ - \underline{\quad} \end{array}$$

$$\begin{array}{r} 3 \overline{)11} \\ - \underline{\quad} \end{array}$$

$$\begin{array}{r} 3 \overline{)1} \\ - \underline{\quad} \end{array}$$

$$\begin{array}{r} 3 \overline{)17} \\ - \underline{\quad} \end{array}$$

$$\begin{array}{r} 3 \overline{)24} \\ - \underline{\quad} \end{array}$$

$$\begin{array}{r} 3 \overline{)13} \\ - \underline{\quad} \end{array}$$

$$\begin{array}{r} 3 \overline{)23} \\ - \underline{\quad} \end{array}$$

Name _____

I Can Divide into Two-Digit Numbers (two-digit quotients, no remainder)

Model:

$$\begin{array}{r} \text{SAMPLE} \\ \downarrow \\ 3 \overline{)42} \end{array}$$

Steps:

1. Underline the part you work first. *Can 3 go into 4?* (yes) Underline the 4.

$$\begin{array}{r} 1 \\ 3 \overline{)42} \\ \underline{-3} \\ 1 \end{array}$$

2. Divide into the underlined part.

3 goes into 4 one time.

Write the answer above the last underlined digit.

3. Multiply. *What is 1 times 3?* (3) Write it below.

4. Subtract. *What is 4 minus 3?* (1)

$$\begin{array}{r} 1 \\ 3 \overline{)42} \\ \underline{-3} \downarrow \\ 12 \end{array}$$

5. Bring down. This is a new step we haven't done before. We have not used the number after the underlined part yet, so we bring it straight down and write it after the 1.

6. Now we have 12 under the line. We read the next part of the problem, "3 goes into 12".

7. Divide. *How many times does 3 go into 12?* (4) Write the 4 above the digit we brought down.

$$\begin{array}{r} 14 \\ 3 \overline{)42} \\ \underline{-3} \\ 12 \\ \underline{-12} \\ 0 \end{array}$$

8. Multiply. *What is 4 times 3?* (12) Write the 12 below the 12.

9. Subtract. *What is 12 minus 12?* (0)

10. Are there any more numbers to bring down? No. So the problem is finished. Every digit after the underlined part has a digit over it.

3 goes into 42 fourteen times with a remainder of 0

I Can Divide into Two-Digit Numbers (two-digit quotients, no remainder)

Model: (continued)

SAMPLE

$$\begin{array}{r}
 \\
 \\
 6 \overline{) 90} \\
 \\
 \\
 \\
 \\
 \\

 \end{array}$$

Steps:

1. Underline the part we work first. *Can 6 go into 9?* (yes) Underline the 9.
2. Divide into the underlined part. *How many times does 6 go into 9?* (once) Write the answer above the last underlined digit.
3. Multiply. *What is 1 times 6?* (6) Write it below.
4. Subtract. *What is 9 minus 6?* (3)
5. Bring down the next number after the underlined part. *What do we bring down?* (0)
6. Read the new problem. "6 goes into 30 how many times?"
3. Divide. *How many times does 6 go into 30?* (5) Write the answer above the digit we brought down.
4. Multiply. *What is 5 times 6?* (30) Write it below.
5. Subtract. *What is 30 minus 30?* (0)
6. Are there any more numbers to bring down? (No.) Every digit after the underlined part has a number over it so we are finished.

$$\begin{array}{r}
 15 \\
 6 \overline{) 90} \\
 \underline{- 6} \downarrow \\
 30 \\
 \underline{- 30} \\
 0
 \end{array}$$

6 goes into 90 fifteen times with a remainder of 0

Name _____

I Can Divide into Two-Digit Numbers (two-digit quotients, no remainder)

Guided Practice:

SAMPLE

$$5 \overline{)90}$$

SAMPLE

SAMPLE

$$7 \overline{)77}$$

$$8 \overline{)96}$$

SAMPLE

$$4 \overline{)60}$$

SAMPLE

SAMPLE

SAMPLE

Name _____

Long Division Lesson 2

I Can Divide into Two-Digit Numbers

Independent Practice:

SAMPLE

$$3 \overline{)78}$$

SAMPLE

SAMPLE

$$2 \overline{)74}$$

SAMPLE

$$6 \overline{)84}$$

SAMPLE

$$9 \overline{)99}$$

SAMPLE

SAMPLE

SAMPLE

Name _____

I Can Divide into Two-Digit Numbers

Independent Practice:

SAMPLE

$$3 \overline{)63}$$

SAMPLE

SAMPLE

$$7 \overline{)98}$$

SAMPLE

$$6 \overline{)78}$$

SAMPLE

$$5 \overline{)85}$$

SAMPLE

SAMPLE

SAMPLE

Name _____

Long Division Lesson 2

I Can Divide into Two-Digit Numbers

Independent Practice:

SAMPLE

$$3 \overline{)96}$$

SAMPLE

$$4 \overline{)76}$$

SAMPLE

$$2 \overline{)90}$$

$$6 \overline{)72}$$

SAMPLE

SAMPLE

Step-by-Step

Math to Mastery

Lesson Workbook

SAMPLE

Add & Subtract

Fractions

With Like Denominators

Name _____

SAMPLE

Name _____

Like Denominators Lesson 1

I Can Add Fractions with the Same Kinds of Parts

Vocabulary

$\frac{1}{3}$ **Numerator** is the top number of a fraction.
It tells the number of parts used.

$\frac{1}{3}$ **Denominator** is the bottom number of a fraction.
It tells what kind of parts there are.
For example, the parts could be halves, thirds, fifths, tenths, etc.
To help you remember, think Denominator is Down.

Practice

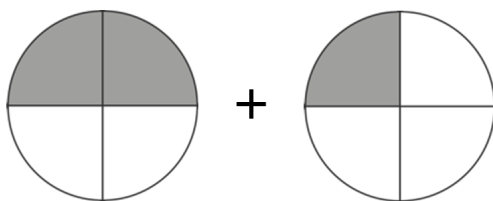
What is the numerator in: $\frac{7}{10}$ $\frac{2}{6}$ $\frac{3}{5}$

What is the denominator in: $\frac{4}{3}$ $\frac{1}{4}$ $\frac{6}{8}$

Model

Today we will add fractions with the same kinds of parts.

Look at these circles. They are both divided into fourths.
They have the same kinds of parts (fourths), so we can add them.



First, I look at the denominators.

We are adding fourths, so I write "4" below the line in the answer.

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

Notice how all of the bottom numbers are the same.

SAMPLE

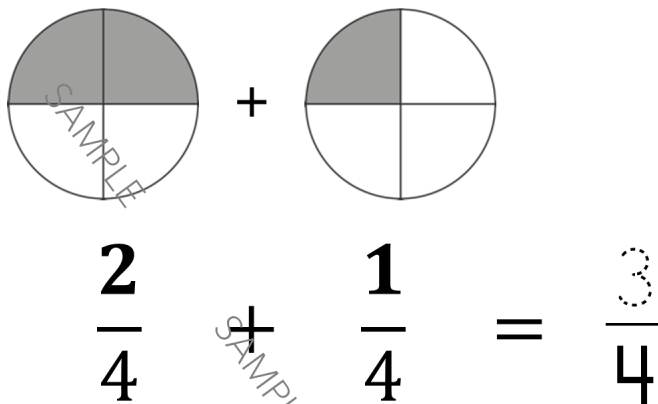
Name _____

Like Denominators Lesson 1

I Can Add Fractions with the Same Kinds of Parts

Model (continued)

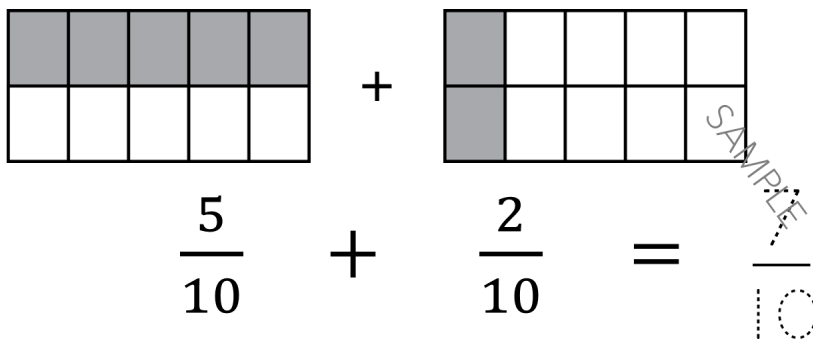
Next, I add the number of parts that are used (shaded).
Two parts in the first circle plus one part in the other circle.
What is $2 + 1$? Write 3 above the line in the answer.



In total there are 3 pieces used.
What kind of pieces are they? They are fourths.

Model Problem 2

Let's do another one. Look at the rectangles, they are divided into tenths.



Step 1: Look at the denominators. What kind of pieces are you adding?

✓ We are adding tenths.

Step 2: Write the same denominator in the answer.

✓ I write 10 below the line in the answer. The denominators are all the same.

Step 3: Look at the used (shaded) parts. How many are there total?

✓ Five parts plus two parts equals seven parts.

Step 4: Write the number of used parts above the line in the answer.

✓ I write 7 above the line. There are 7 used pieces total.

Read the problem: "Five-tenths plus two-tenths equals seven-tenths"

I Can Add Fractions with the Same Kinds of Parts

Guided Practice

Step 1: Look at the denominators. What kind of pieces are you adding?

Step 2: Write the same denominator in the answer.

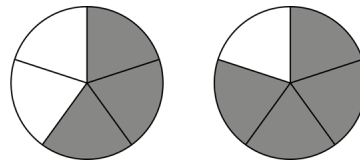
Step 3: Look at the used (shaded) parts. How many are there total?

Step 4: Write the number of used parts above the line in the answer.

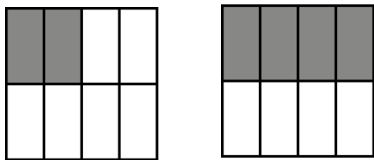
Read the problem.



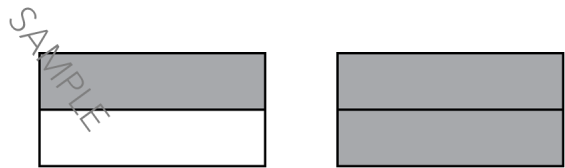
$$\frac{2}{3} + \frac{2}{3} = \frac{\quad}{3}$$



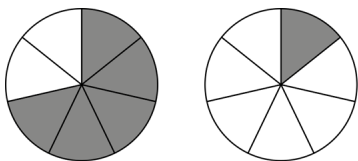
$$\frac{3}{5} + \frac{4}{5} = \frac{\quad}{5}$$



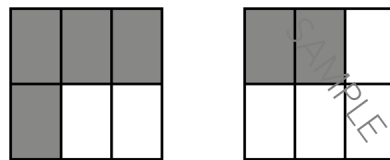
$$\frac{2}{8} + \frac{4}{8} = \frac{\quad}{8}$$



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



$$\frac{5}{7} + \frac{1}{7} = \frac{\quad}{7}$$



$$\frac{4}{6} + \frac{2}{6} = \frac{\quad}{6}$$

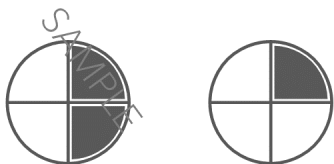
SAMPLE

Name _____

Like Denominators Lesson 1

I Can Add Fractions with the Same Kinds of Parts

Independent Practice



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



$$\frac{2}{3} + \frac{2}{3} = \frac{\quad}{\quad}$$



$$\frac{1}{8} + \frac{4}{8} = \frac{\quad}{\quad}$$



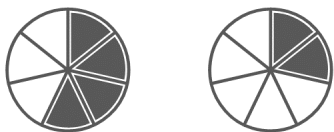
$$\frac{2}{5} + \frac{1}{5} = \frac{\quad}{\quad}$$



$$\frac{5}{6} + \frac{3}{6} = \frac{\quad}{\quad}$$



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



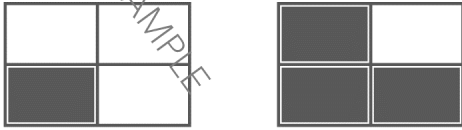
$$\frac{4}{7} + \frac{2}{7} = \frac{\quad}{\quad}$$



$$\frac{4}{10} + \frac{5}{10} = \frac{\quad}{\quad}$$

I Can Add Fractions with the Same Kinds of Parts

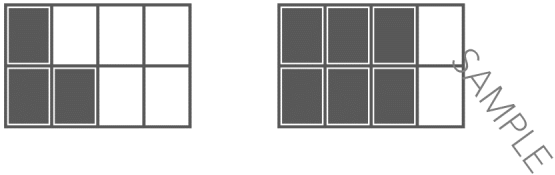
Independent Practice



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



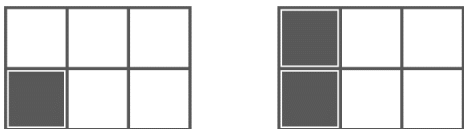
$$\frac{3}{5} + \frac{1}{5} = \underline{\quad}$$



$$\frac{3}{8} + \frac{6}{8} = \underline{\quad}$$



$$\frac{2}{3} + \frac{1}{3} = \underline{\quad}$$



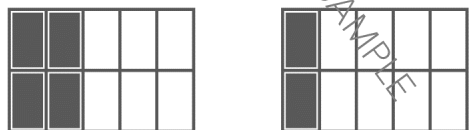
$$\frac{1}{6} + \frac{2}{6} = \underline{\quad}$$



$$\frac{2}{2} + \frac{2}{2} = \underline{\quad}$$



$$\frac{3}{7} + \frac{6}{7} = \underline{\quad}$$



$$\frac{4}{10} + \frac{2}{10} = \underline{\quad}$$

I Can Subtract Mixed Numbers (With Like Denominators)

Vocabulary

Numerator: number of parts used

Denominator: what kind of parts (the number of parts in each whole)

Mixed numbers have a whole-number part and a fraction part.

Rule

We can only add and subtract mixed numbers with the same denominator.

Model

Today you will subtract mixed numbers.

Step 1: Look at the sign, is it plus or minus?

$$5 \frac{7}{8} - 2 \frac{3}{8} =$$

It is – so we will subtract the mixed numbers.

Step 2: Check, are the denominators the same?

(Cross out the problem if you can't work it.)

Yes, the denominators are both 8 so we can work the problem.

Step 3: Subtract the fractions first:

Keep the same denominator. Subtract the numerators.

First, I subtract the fractions. Ignore the whole numbers for now.

I keep the same denominator and write it below the line in the answer.

Then I subtract the numerators. What is $7 - 3$?

I write 4 above the line in the answer.

$$5 \frac{7}{8} - 2 \frac{3}{8} = \boxed{} \frac{\boxed{4}}{\boxed{8}}$$

Step 4: Subtract the whole numbers.

Next, I subtract the whole numbers. The whole numbers are 5 and 2.

What is $5 - 2$? I write 3 in front of the fraction in the big box.

$$5 \frac{7}{8} - 2 \frac{3}{8} = \boxed{3} \frac{\boxed{4}}{\boxed{8}}$$

Read the problem:

"Five and seven-eighths minus two and three-eighths equals three and four-eighths."

SAMPLE

Name _____

Like Denominators Lesson 14

I Can Subtract Mixed Numbers (With Like Denominators)

Guided Practice

Step 1: Look at the sign. Is it plus or minus?

Step 2: Check, are the denominators the same? Cross it out if you can't work it.

Step 3: Subtract the fractions first

 Keep the denominators the same Subtract the numerators

Step 4: Subtract the whole numbers

$$8 \frac{2}{10} - 6 \frac{1}{10} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$7 \frac{6}{7} - 3 \frac{1}{7} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$5 \frac{4}{6} - 4 \frac{2}{6} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$9 \frac{3}{4} - 6 \frac{1}{9} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$3 \frac{3}{2} - 1 \frac{1}{9} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$6 \frac{7}{5} - 3 \frac{2}{5} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$4 \frac{5}{4} - 2 \frac{2}{4} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$2 \frac{6}{8} - 1 \frac{4}{8} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

I Can Subtract Mixed Numbers (With Like Denominators)

Independent Practice

Read the problem. Are the denominators the same?

If you can't add or subtract the fractions, cross out the problem.

Subtract the fractions first, then subtract the whole numbers.

$$7\frac{6}{7} - 4\frac{5}{7} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$9\frac{5}{4} - 3\frac{2}{4} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

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

$$8\frac{5}{3} - 4\frac{2}{7} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$5\frac{6}{8} - 4\frac{3}{8} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$5\frac{8}{9} - 2\frac{2}{9} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$6\frac{5}{2} - 2\frac{2}{6} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$7\frac{8}{5} - 3\frac{5}{5} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$2\frac{7}{8} - 1\frac{1}{8} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$4\frac{6}{6} - 2\frac{2}{6} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

SAMPLE

Name _____

Like Denominators Lesson 14

I Can Subtract Mixed Numbers (With Like Denominators)

Independent Practice

Read the problem. Are the denominators the same?

If you can't add or subtract the fractions, cross out the problem.

Subtract the fractions first, then subtract the whole numbers.

$$4\frac{6}{8} - 3\frac{2}{8} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$8\frac{5}{4} - 5\frac{2}{8} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$9\frac{3}{6} - 2\frac{1}{6} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$9\frac{3}{3} - 6\frac{2}{3} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$6\frac{2}{2} - 4\frac{3}{7} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$6\frac{5}{7} - 2\frac{1}{7} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$7\frac{8}{5} - 5\frac{4}{5} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$2\frac{5}{8} - 1\frac{1}{9} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$4\frac{8}{9} - 1\frac{3}{9} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

$$5\frac{3}{4} - 3\frac{1}{4} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

SAMPLE

Step-by-Step

Math to Mastery

Lesson Workbook

SAMPLE

Decimals

SAMPLE

Add

SAMPLE

Subtract

SAMPLE

Multiply

SAMPLE

Divide

SAMPLE

Name _____

I Can Line Up Addition Problems Vertically

Model

In this lesson you will line up decimal points and write problems vertically before you add.

Look at this problem:

$$36.4 + 2.57 =$$

To work the problem, I'll rewrite it vertically. I make sure the decimal points are lined up.

$36.4 + 2.57 =$	+	36.4	
			2.57

Next, I write a zero after the four to make an equivalent decimal. Now both addends go to the hundredths place.

+	36.40	←	Now both numbers go to the hundredths place.
	2.57		

Then I add. Bring the decimal point straight down.

+	36.40	
	2.57	
	38.97	

The answer is thirty-eight and ninety-seven hundredths.

I Can Line Up Addition Problems Vertically

Model (continued)

Here's another one:

$$.95 + .4 =$$

Step 1: Line up the decimal points and write the problem vertically.

$$\begin{array}{r}
 .95 \\
 + .4 \\
 \hline
 \end{array}$$

Step 2: Write zero to make an equivalent decimal. Make sure both addends have the same number of digits after the decimal point.

$$\begin{array}{r}
 .95 \\
 + .40 \\
 \hline
 \end{array}$$

Now both numbers go to the hundredths place.

Step 3: Add

Step 4: Bring the decimal point straight down.

$$\begin{array}{r}
 1 \\
 .95 \\
 + .40 \\
 \hline
 1.35
 \end{array}$$

The answer is one and thirty-five hundredths.

I Can Line Up Addition Problems Vertically

Guided Practice

Step 1 Line up the decimal points and write the problem vertically.

Step 2 Write zero(s) to make an equivalent decimal if needed.

Step 3 Add

Step 4 Bring the decimal point straight down. ↓

$$71.9 + 4.5 = \underline{\hspace{2cm}}$$

+				
+				

$$6.5 + 2.18 = \underline{\hspace{2cm}}$$

+				
+				

$$2.3 + 67.9 = \underline{\hspace{2cm}}$$

+				
+				

$$.8 + .34 = \underline{\hspace{2cm}}$$

+				
+				

SAMPLE

Name _____

Add & Subtract Decimals Lesson 5

I Can Line Up Addition Problems Vertically

Independent Practice

$$19.8 + 7.5 = \underline{\hspace{2cm}}$$

+					

$$8.9 + 2.01 = \underline{\hspace{2cm}}$$

+					

$$3.2 + 1.9 = \underline{\hspace{2cm}}$$

+					

$$.2 + .72 = \underline{\hspace{2cm}}$$

+					

$$50.3 + .31 = \underline{\hspace{2cm}}$$

+					

SAMPLE

Name _____

Add & Subtract Decimals Lesson 5

I Can Line Up Addition Problems Vertically

Independent Practice

SAMPLE

$$2.44 + .6 = \underline{\hspace{2cm}}$$

+					

SAMPLE

$$10.2 + .53 = \underline{\hspace{2cm}}$$

+					

SAMPLE

$$56.81 + .4 = \underline{\hspace{2cm}}$$

+					

SAMPLE

$$5.6 + 73.9 = \underline{\hspace{2cm}}$$

+					

SAMPLE

$$7.08 + 6.4 = \underline{\hspace{2cm}}$$

+					

SAMPLE

I Can Write the Decimal Point in a Product

Model

Rule:

When you multiply decimals, count the total number of decimal places in the factors. The answer will have the same number of decimal places.

In this lesson the problems are already multiplied for you. All you will do is decide where to write the decimal point in the answer.

Look at this problem:

Steps 1 and 2 are done. It is written vertically and multiplied.

		3	5	.	4
×				.	06
	2	1	2	4	
+	0	0	0	0	
	2	1	2	4	

Step 3 Count the digits after the decimal points in the factors.

		3	5	.	4
×				.	06
	2	1	2	4	
+	0	0	0	0	
	2	1	2	4	

There are 3 digits to the right of the decimal points, so the answer will need 3 digits to the right of the decimal point.

Step 4 Write the decimal point in the product.

The answer is: **2.124** (two and one hundred twenty-four thousandths)

I Can Write the Decimal Point in a Product

Guided Practice

- ✓ Step 1: Rewrite the problem vertically. No need to line up decimal points.
- ✓ Step 2: Multiply.
- ☐ Step 3: Count the digits after the decimal points in the problem.
- ☐ Step 4: Give the answer the same number of decimal places.

$$4.7 \times 5.9 =$$

			4	.	7
×			.	5	9
<hr/>					
		4	2	3	
+	2	3	5	0	
<hr/>					
	2	7	7	3	

$$1.62 \times 4.5 =$$

		1	.	6	2
×			4	.	5
<hr/>					
		8	1	0	
+	6	4	8	0	
<hr/>					
	7	2	9	0	

$$.393 \times .68 =$$

		.	3	9	3
×			.	6	8
<hr/>					
		3	1	4	4
+	2	3	5	8	0
<hr/>					
	2	6	7	2	4

$$.371 \times 8.2 =$$

		.	3	7	1
×			8	.	2
<hr/>					
		7	4	2	
+	2	9	6	8	0
<hr/>					
	3	0	4	2	2

I Can Write the Decimal Point in a Product

Independent Practice

			.	1 5
×			8 .	2
<hr/>				
			3	0
+	1	2	0	0
<hr/>				
	1	2	3	0

			2	0 . 4
×			.	3 6
<hr/>				
	1	2	2	4
+	6	1	2	0
<hr/>				
	7	3	4	4

			1 .	9 5
×			.	2 7
<hr/>				
	1	3	6	5
+	3	9	0	0
<hr/>				
	5	2	6	5

			1	3 . 6
×			9 .	8
<hr/>				
	1	0	8	8
+	1	2	2	4 0
<hr/>				
	1	3	3	2 8

			3 .	6
×			1 .	4
<hr/>				
		1	4	4
+		3	6	0
<hr/>				
		5	0	4

			3	8 4
×			9 .	6
<hr/>				
	2	3	0	4
+	3	4	5	6 0
<hr/>				
	3	6	9	6 4

I Can Write the Decimal Point in a Product

Independent Practice

		.3	6	9	
×			4	.7	
<hr/>					
	2	5	8	3	
+	1	4	7	6	0
<hr/>					
	1	7	3	4	3

			1	.7
×			.5	8
<hr/>				
		1	3	6
+		8	5	0
<hr/>				
		9	8	6

		3	0	.6	
×			8	.4	
<hr/>					
	1	2	2	4	
+	2	4	4	8	0
<hr/>					
	2	5	7	0	4

		2	7	.4
×			.0	5
<hr/>				
	1	3	7	0
+	0	0	0	0
<hr/>				
		1	3	7

			5	.9
×			2	.7
<hr/>				
		4	1	3
+	1	1	8	0
<hr/>				
	1	5	9	3

			1	7
×			2	5
<hr/>				
		8	5	
+		3	4	0
<hr/>				
		4	2	5

Thank you!

Thank you for downloading the preview.

I hope you find what you are looking for!