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Add and Subtract Multi-Digit Numbers

Dear Family,

In this chapter, your student is learning to add and subtract multi-digit numbers. The lessons address adding and subtracting two-digit and three-digit numbers, as well as strategies for solving two-step addition and subtraction word problems.

The vocabulary words for this chapter are: Addition Property of Zero, Associative Property of Addition, Commutative Property of Addition, and inverse operations.

You and your student can practice adding and subtracting on your next trip to a department store!

- Look for price tags with three-digit numbers. Point out two large items, like pieces of furniture, to your student. Ask your student, "What would be the total cost if we bought [Item A] and [Item B]?" Have them use the count on strategy and make a ten strategy to find their answer. (Make sure to bring a notepad for all this problem solving!) Then, point out two other items. Ask, "What would be the cost if we bought these two items instead?" Encourage your student to use mental math or partial sums to add.
- Once your student is comfortable with these addition strategies, you can ask them to add up to four items. Ask your student how they can check if their answer is reasonable (such as using their estimation strategies from the last chapter).
- Your student is also learning many strategies for subtracting multi-digit numbers. Look for an aisle of items with a variety of price tags with three-digit numbers. Point out an item and ask, "If you had \$532 and bought [Item C], how much money would you have left?" Encourage your student to use the count back strategy and count on strategy to find their answer. Then, once they have mastered those subtraction strategies, encourage them to use mental math to subtract.

By the end of this chapter, your student should feel confident with the learning targets and success criteria on the next page. Encourage your student to think of other contexts in which they add and subtract multi-digit numbers, such as figuring out how much money they will have left over after purchasing two separate items.

Have a great time shopping!

Chapter 8

Add and Subtract Multi-Digit Numbers (continued)

Lesson	Learning Target	Success Criteria
8.1 Identify Addition Properties	Identify and use addition properties.	 I can identify the Associative and Commutative Properties of Addition. I can identify the Addition Property of Zero. I can use an addition property to find a sum. I can explain what the addition properties mean.
8.2 Use Number Lines to Add	Use a number line to find a sum.	 I can use the count on strategy to add on a number line. I can use the make a ten strategy to add on a number line.
8.3 Use Mental Math to Add	Use mental math to find a sum.	 I can use compensation to add. I can use the make a ten strategy to add. I can explain how to change one addend to a decade number or compatible number.
8.4 Use Partial Sums to Add	Use partial sums to find a sum.	 I can write addends in expanded form. I can add to find the hundreds, tens, and ones. I can add the partial sums.
8.5 Add Three-Digit Numbers	Add three-digit numbers.	 I can round to estimate a sum. I can add three-digit numbers. I can use an estimate to check whether my answer is reasonable.
8.6 Add Three or More Numbers	Add up to four numbers.	 I can round to estimate a sum. I can identify compatible numbers. I can find a sum and check whether it is reasonable.
8.7 Use Number Lines to Subtract	Use a number line to find a difference.	 I can use the count back strategy to subtract on a number line. I can use the count on strategy to subtract on a number line.
8.8 Use Mental Math to Subtract	Use mental math to find a difference.	 I can explain how to change both numbers to use compensation to subtract. I can explain how to change one number to use compensation to subtract.
8.9 Subtract Three- Digit Numbers	Subtract three-digit numbers.	 I can round to estimate a difference. I can subtract three-digit numbers. I can use an estimate to check whether my answer is reasonable.
8.10 Relate Addition and Subtraction	Use inverse operations to check answers.	 I can use addition to check a subtraction answer. I can use subtraction to check an addition answer. I can explain the relationship between addition and subtraction.
8.11 Problem Solving: Addition and Subtraction	Use the problem-solving plan to solve two-step addition and subtraction word problems.	 I can understand a problem. I can make a plan to solve a problem using letters to represent the unknown numbers. I can solve a problem and check whether my answer is reasonable.

Capítulo 8

Sumar y restar números de varios dígitos

Querida familia:

En este capítulo, el estudiante aprende a sumar y restar números de varios dígitos —de dos y de tres— y estrategias para resolver enunciados de problemas de suma y resta de dos pasos.

El vocabulario asociado es: propiedad de cero de la suma, propiedad asociativa de la suma, propiedad conmutativa de la suma y operaciones inversas.

Usted y el estudiante pueden practicar la suma y la resta en la próxima visita de compras a una tienda.

- Busque precios con números de tres dígitos. Señale dos artículos grandes, como muebles y pregunte al estudiante: "¿Cuál sería el costo total si compráramos [artículo A] y [artículo B]?". Pídale que use la estrategia de seguir contando y de llegar a diez para hallar la respuesta. (Lleve una libreta para que pueda resolver estos problemas.) Luego señale otros dos artículos y pregunte: "¿Cuál sería el costo si compráramos estos dos?". Anímelo a usar el cálculo mental o las sumas parciales para sumar.
- Una vez que se sienta cómodo con estas estrategias de sucma, pídale que sume hasta cuatro artículos. Pregúntele cómo verifica si la respuesta es razonable (por ejemplo, con estrategias de estimación del último capítulo).
- El estudiante también aprende muchas estrategias para restar números de varios dígitos. Busque artículos con precios que tengan números de tres dígitos, señale uno y pregunte: "¿Si tuvieras \$532 y compraras [artículo C], cuánto dinero te quedaría?". Anímelo a usar la estrategia de contar hacia atrás y de seguir contando para hallar la respuesta. Una vez que domine estas estrategias de resta, anímeloo para usar el cálculo mental para restar.

Hacia el final de este capítulo, el estudiante debe sentirse confiado con el objetivo de aprendizaje y el criterio de evaluación de la próxima página. Anímelo a pensar en otras posibilidades para sumar y restar números de varios dígitos, por ejemplo, saber cuánto dinerlo le queda después de comprar dos artículos por separado.

iDisfruten haciendo compras!

Capítulo 8

Sumar y restar números de varios dígitos

(continuación)

Lección	Objetivo de aprendizaje	Criterios de éxito
8.1 Identificar las propiedades de la suma	Identificar y usar las propiedades de la suma.	 Sé identificar las propiedades conmutativas y asociativas de la suma. Sé identificar la propiedad de cero de la suma. Sé usar una propiedad de la suma para hallar una suma. Sé explicar qué significan las propiedades de la suma.
8.2 Usar rectas numéricas para sumar	Usar una recta numérica para hallar una suma.	 Sé usar la estrategia seguir contando para sumar en una recta numérica. Sé usar la estrategia llegar a diez para sumar en una recta numérica.
8.3 Usar cálculo mental para sumar	Usar cálculo mental para hallar una suma.	 Sé usar la compensación para sumar. Sé usar la estrategia <i>llegar a diez</i> para sumar. Sé explicar cómo convertir un sumando en un número de década o número compatible.
8.4 Usar sumas parciales para sumar	Usar sumas parciales para hallar una suma.	 Sé escribir sumandos de forma expandida. Sé sumar para hallar las centenas, unidades y decenas. Sé hacer sumas parciales.
8.5 Sumar números de tres dígitos	Sumar números de tres dígitos.	 Sé redondear para estimar una suma. Sé sumar números de tres dígitos. Sé usar una estimación para verificar si mi respuesta es razonable.
8.6 Sumar tres o más números	Sumar hasta cuatro números.	 Sé redondear para estimar una suma. Sé identificar números compatibles. Sé hallar una suma y verificar si es razonable.
8.7 Usar rectas numéricas para restar	Usar una recta numérica para hallar una diferencia.	 Sé usar la estrategia seguir contando para restar en una recta numérica. Sé usar la estrategia llegar a diez para restar en una recta numérica.
8.8 Usar cálculo mental para restar	Usar cálculo mental para hallar una diferencia.	 Sé explicar cómo cambiar ambos números para usar la compensación para restar. Sé explicar cómo cambiar un número para usar la compensación para restar.
8.9 Restar números de tres dígitos	Restar números de tres dígitos.	 Sé redondear para estimar una resta. Sé restar números de tres dígitos. Sé usar una estimación para verificar si mi respuesta es razonable.
8.10 Relacionar la suma y la resta	Usar operaciones inversas para verificar la respuesta.	 Sé usar la suma para verificar una resta. Sé usar la resta para verificar una suma. Sé explicar la relación entre la suma y la resta.
8.11 Resolución de problemas: Suma y resta	Usar el plan de resolución de problemas para resolver enunciados de problemas de suma y de resta de dos pasos.	 Sé entender un problema. Sé hacer un plan para resolver un problema, usando letras para representar los números desconocidos. Sé resolver un problema y verificar si mi respuesta es razonable.

Lesson 8.1 Daily Skills Practice For use before Lesson 8.1

1. You buy a net and 3 jars. You spend \$28. The net cost \$10. Each jar cost the same amount. How much is each jar?

Each jar cost \$_____.



1. Write what you know about this phrase. Give an example.

compatible numbers

Prerequisite Skills Practice For use before Lesson 8.1

Find the product.

2.
$$5 \times (2 \times 9) =$$



Extra Practice

Identify the property.

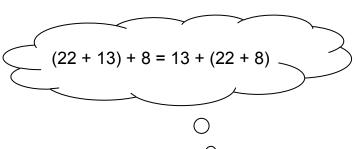
3.
$$(62 + 11) + 47 = 62 + (11 + 47)$$

5.
$$(94 + 71) + 88 = 94 + (71 + 88)$$

6.
$$0 + 25 = 25$$

Find the missing number.

13. Newton uses two properties. Identify the properties he uses.





- **14.** Write an equation that shows the Associative Property of Addition.
- **15.** Write an equation that shows the Addition Property of Zero.

16. Your friend says 23 + 18 = 18 + 23 shows the Associative Property of Addition. Is your friend correct? Explain.

17. A craftsman uses 17 red beads, 15 blue beads, and 13 yellow beads to make bracelets. How many beads does he use?

The craftsman uses 9 beads for each bracelet. How many bracelets does he make? Explain.

Lesson 8.1

Reteach

$$2+4=4+2$$

$$\downarrow \qquad \qquad \downarrow$$

$$6=6$$

Changing the order of addends does not change the sum.

Associative Property of Addition

Changing the grouping of addends does not change the sum.

$$5 + 0 = 5$$

$$\downarrow$$

$$5 = 5$$

Addition Property of Zero

The sum of any number and 0 is that number.

Identify the property.

2.
$$(51 + 42) + 31 = 51 + (42 + 31)$$

3.
$$(43 + 75) + 14 = 43 + (75 + 14)$$



Enrichment and Extension

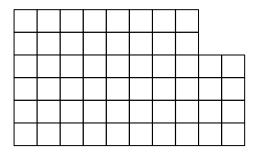
1. Newton and Descartes need to bake 60 fruit tarts for a bake sale. Newton bakes 18 fruit tarts in the morning and 19 fruit tarts in the afternoon. Descartes bakes 22 fruit tarts in the evening. Did Newton and Descartes bake enough fruit tarts for the bake sale? Explain.

2. You and your friend need to find 125 chairs for the school assembly. You find 32 chairs in the third-grade classroom and 40 chairs in the fourth-grade classroom. Your friend finds 58 chairs in the sixth-grade classroom. Did you and your friend find enough chairs for the school assembly? Explain.

3. There are 150 pages in Newton's mystery novel. Newton reads 25 pages in the morning, 12 pages in the afternoon, 85 pages in the evening, and 18 pages before bed. Did Newton finish his novel? Explain.

Lesson 8.2 Daily Skills Practice For use before Lesson 8.2

1. Find the area of the shape.



= 1 square inch

The area is _____ square inches.



1. Write what you know about this phrase. Give an example.

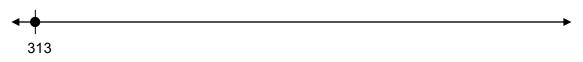
Addition Property of Zero

Prerequisite Skills Practice For use before Lesson 8.2

Find the missing number.

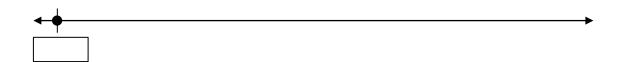
Extra Practice

1. Use the *count on* strategy to find 313 + 76.



313 + 76 = _____

2. Use the *make a ten* strategy to find 54 + 673.



54 + 673 = _____

Find the sum.

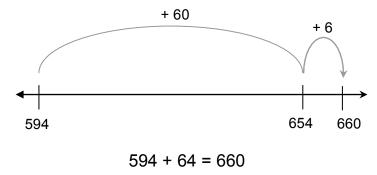
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7. Your friend uses a number line to find 594 + 64. Is your friend correct? Explain.



8. Your friend says he can find 88 + 623 by starting at 623 on a number line because of the Commutative Property of Addition. Is your friend correct? Explain.

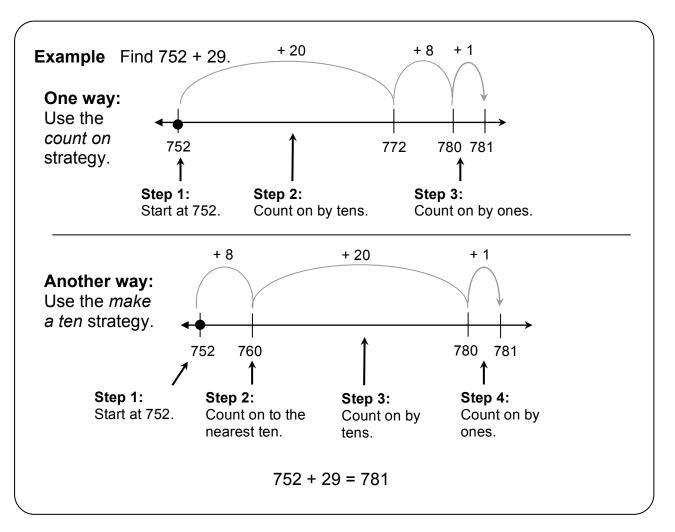
9. Newton needs to write a 500-word essay. He writes 438 words during class. He finishes his essay by writing 56 words at home. Does Newton's essay have enough words?

10. Descartes is listening to a 300-minute audiobook. He listens to 71 minutes one week. He listens to 229 minutes the next week. Did Descartes finish the audiobook?

11. There are 570 offices in an office building. There are 92 corner offices rented, and 457 non-corner offices rented. How many offices are *not* rented?

Lesson 8.2

Reteach



1. Use the *count on* strategy to find 409 + 65.



2. Use the make a ten strategy to find 87 + 526.





Enrichment and Extension

1. There are 202 students at the school picnic. The third-grade teacher brings 168 juice boxes. The fourth-grade teacher brings 5 packages of juice boxes. Each package has 8 juice boxes. How many juice boxes are left after each student gets one?

2. There are 600 guests at a New Year's party. The host brings 574 party hats. The host's friend brings 7 packages of party hats. Each package has 8 party hats. How many party hats are left after each guest gets one?

3. There are 950 runners at a marathon race. The marathon sponsor brings 846 water bottles. The runners' club brings 9 packages of water bottles. Each package has 9 water bottles. How many more water bottles are needed for each runner to get one?

Lesson 8.3 Daily Skills Practice For use before Lesson 8.3

1. Use the multiplication table to complete the related facts.

Х	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	တ	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	40	40	48	56	64	72	80
9	9	18	27	40	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

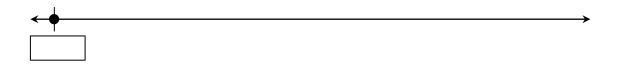


1. Write what you know about this phrase. Give an example.

Associative Property of Addition

Prerequisite Skills Practice For use before Lesson 8.3

1. Use the *make a ten* strategy to find 89 + 314.



Extra Practice

Use compensation to find the sum.

Make a ten and count on to find the sum.

8. Explain how to make a ten to find the sum.

Explain how to use compensation to find the sum.

268 **9.** + 416

- **10.** A binder holds 300 sheets of paper. You have 173 math papers and 139 science papers. Can the binder hold all of your papers?
- **11.** A MP3 player holds 1,000 songs. You have 279 pop songs and 712 rock songs. Can the MP3 player hold all of your songs?
- **12.** A runner has \$500. She wants buy two of the items. Which groups of two itens can she by? Explain.



Watch



Jacket



Running shoes

The runner buys the two cheapest items. How much money does she have left?

Lesson 8.3

Reteach

Example Find 152 + 483.

Use compensation to add.

Think: How can I make a ten?

So,
$$152 + 438 = 590$$
.

Example Find 387 + 316.

Make a ten and count on to add.

Think: What is the next ten after 387?

$$387 + 316 = 387 + (3 + 300 + 10 + 3)$$

$$= 390 + 300 + 10 + 3$$

$$= 690 + 10 + 3$$

$$= 700 + 3$$

$$= 703$$
So, 387 + 316 = 703.

1. Use compensation to find 246 + 489.

2. Make a ten and count on to find 167 + 454.

Lesson 8.3

Enrichment and Extension

1. Your school is raising money for the food bank. The 3rd grade classes raised \$247 more than the 2nd grade classes. The 4th grade classes raised \$132 more than the 5th grade classes. How much money did the four grades raise in all? Which grade raised the most money? How much did they raise?

Grade	Money Raised		
2	\$194		
3	?		
4	?		
5	\$281		

2. Your library is buying new furniture. A table costs \$511 more than a set of chairs. A study cubicle costs \$264 more than a bookshelf. How much does the furniture cost in all? Which piece of furniture costs the most money? How much does it cost?

Furniture	Cost	
Table	?	
Bookshelf	\$428	
Study	?	
Cubicle	•	
Set of	\$147	
Chairs	Φ147	

Lesson 8.4 Daily Skills Practice For use before Lesson 8.4

1. Choose the value of the underlined digit.

365

600

6

60



1. Write what you know about this phrase. Give an example.

Commutative Property of Addition

Prerequisite Skills Practice For use before Lesson 8.4

Write the value of the underlined digit.

1. <u>5</u> 01	2 . 8 <u>8</u> 9	3. 14 <u>7</u>

Extra Practice

Use partial sums to add.

6. Your friend uses partial sums to find 286 + 530. Is your friend correct? Explain.

$$\begin{array}{rcl}
286 & = & 200 + 80 + 6 \\
+ & 530 & = & 500 + 0 + 3 \\
\hline
& & 700 + 80 + 9 & = & 789
\end{array}$$

7. Write and solve the next problem in the pattern.

- **8.** There are worker ants and drone ants in an ant colony. An ant colony has 275 fewer drones than workers. There are 481 drone ants. How many worker ants are there?
- **9.** There are cars and trucks in an airport parking lot. The parking lot has 367 fewer cars than trucks. There are 439 cars. How many trucks are there?
- 10. Three athletes compete in Olympic weight lifting. Weight lifter A lifts 118 fewer pounds than Weight lifter B. Who lifts the most weight?

Weight Lifter	Weight Lifted (pounds)
Α	234
В	?
С	367

Name _____

Lesson **8.4**

Reteach

Example Find 309 + 538.

Step 1: Write each number in expanded form.

Step 2: Find the partial sums.

Step 3: Add the partial sums.

Use partial sums to add.



Enrichment and Extension

1. Which pool had more spectators in all? Explain

Swim Competition Spectators				
Pool A Pool B				
Saturday	271 476			
Sunday 387 139				

On which day were there more spectators in all? Explain

2. Which track had more spectators in all? Explain.

Track Competition Spectators				
Track A Track B				
Friday	iday 626 269			
Saturday 243 707				

On which day were there more spectators in all? Explain

Daily Skills Practice For use before Lesson 8.5

1. Find the product.



1. Write what you know about this phrase. Give an example.

tape diagram

Prerequisite Skills Practice For use before Lesson 8.5

1. Round to the nearest ten to estimate the sum.

33 →	
+ 58	

2. Round to the nearest hundred to estimate the sum.

	786	\longrightarrow		
+	121	→	+	



Extra Practice

Find the sum. Check whether your answer is reasonable.

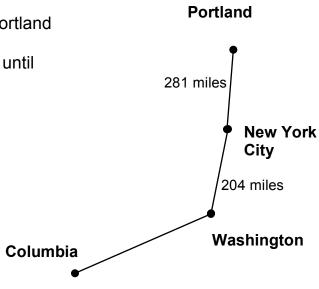
13. Complete the addends so you need to regroup to add. Then find the sums.

14. Find the missing digits.

9 1 [

9

- **15.** Descartes wants to complete a 900-mile hike in 2 months. He hikes 239 miles the first month and 647 miles the second month. Does he complete the hike?
- **16.** Newton wants to complete a 1,000-page book in 2 weeks. He reads 527 pages the first week and 473 pages the second week. Does he complete the book?
- 17. You ship a package 890 miles from Portland to Columbia. The package is now in Washington. How many miles are left until your package is delivered?



Lesson 8.5

Reteach

Example Find 524 + 182. Check whether your answer is reasonable.

700

The sum is about 700.

Step 1: Use compatible numbers to estimate the sum.

Remember you can also round addends to the nearest ten or hundred to estimate sums.

Step 2: Find the sum. Add the ones, then the tens, then the hundreds.



706 is close to 700, so the answer is reasonable.

Step 3: Check.

Find the sum. Check whether your answer is reasonable.

1. Estimate: _____

2. Estimate: _____

3. Estimate:

4. Estimate: _____



Enrichment and Extension

1. Newton has 276 stamps in his stamp collection. He wants to have exactly 700 stamps in all. Which stamp collection should he buy? Explain.

Collection	Number of Stamps
Α	362
В	387
С	424
D	431

Descartes buys Collection A and Collection B. How many stamps does he have in all?

Who has the larger stamp collection? Explain.

2. Your friend has 343 coins in her coin collection. She wants to have exactly 900 coins in all. Which coin collection should she buy? Explain.

Collection	Number of Coins
Α	557
В	568
С	482
D	415

Your cousin buys Collection C and Collection D. How many coins does he have in all?

Who has the larger coin collection? Explain.

Lesson 8.6 Daily Skills Practice For use before Lesson 8.6

1. Find the product.



1. Write what you know about this phrase. Give an example.

column

Prerequisite Skills Practice For use before Lesson 8.6 Lesson

Find the sum. Check whether your answer is reasonable.

1.	Estimate:	
----	-----------	--

Lesson 8.6

Extra Practice

Find the sum. Check whether your answer is reasonable.

1. Estimate: _____

2. Estimate: _____

3. Estimate: _____

23
117
+ 129

4. Estimate: _____

5. Estimate: _____

6. Estimate: _____

309
228
+416

7. Estimate: _____

8. Estimate: _____

9. Estimate: _____

321
173
129
+ 375

10. Which problem can you solve without regrouping?

282	141	195	261
274	155	300	215
+260	+ 399	+315	+323

11. You add (392 + 143) + 292. Your friend adds 392 + (143 + 292). Do you both get the same answer? Use an addition property to explain.

12. A canoe has a weight limit of 700 pounds. One rider weighs 196 pounds. Another rider weighs 233 pounds. They each have 89 pounds of gear. Can both riders safely ride in the canoe with their gear?

13. Your principal agrees to make a lip-sync video if your school raises \$1,000 for a local charity in 5 days. How much more money does your school need to raise?

Day	Amount of Money
1	\$428
2	\$261
3	\$172
4	\$135

Lesson 8.6

Reteach

Example Find 209 + 127 + 253. Check whether your answer is reasonable.

Step 1: Estimate.
Round each addend to the nearest ten.

$$\begin{array}{cccc}
209 & \longrightarrow & 210 \\
127 & \longrightarrow & 130 \\
+ 253 & \longrightarrow & 250 \\
\hline
& & & & & & \\
\hline
& & & & \\
\hline
& & & & \\
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& & & & \\
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& & & & \\
\hline
& & & & \\
\hline
& & & & \\
\hline
& & & & \\$$

Step 2: Find the sum. Add the ones, then the tens, then the hundreds.

Step 3: Check.

589 is close to 590, so the answer is reasonable.

Find the sum. Check whether your answer is reasonable.

1. Estimate:

2. Estimate: _____

3. Estimate:

4. Estimate: _____

5. Estimate: _____

6. Estimate



Enrichment and Extension

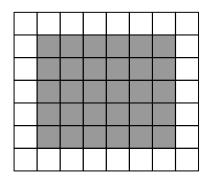
1. In November, a toy store owner sells 392 inventor kits, 113 teddy bears, 207 headphones, and 161 laser tag sets. In December, the toy store owner sells 113 inventor kits, 379 teddy bears, 212 headphones, and 184 laser tag sets. In which month did the toy store owner sell the most items in all? Explain.

2. In January, a clothing boutique owner sells 317 blouses, 283 dresses, 279 skirts, and 120 pairs of pants. In February, the clothing boutique owner sells 298 blouses, 126 dresses, 185 skirts, and 387 pairs of pants. In which month did the clothing boutique owner sell the most items in all? Explain.

3. In July, a luggage store owner sells 124 suitcases, 259 purses, 73 backpacks, and 156 wallets. In August, the luggage store owner sells 37 suitcases, 151 purses, 219 backpacks, and 194 wallets. In which month did the luggage store owner sell the most items in all? Explain.

Lesson 8.7 Daily Skills Practice For use before Lesson 8.7

1. Find the area of the gray rectangle.



= 1 square centimeter

The area is _____ square centimeters.



1. Write what you know about this word. Give an example.

multiplication

Prerequisite Skills Practice For use before Lesson 8.7

1. Use the *count on* strategy to find 231 + 167.



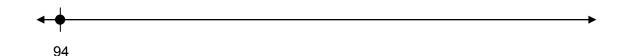
Lesson 8.7

Extra Practice

1. Use the *count back* strategy to find 341 - 77.

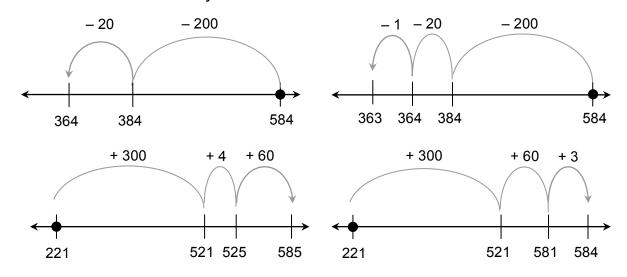


2. Use the *count on* strategy to find 205 – 94.



7. Write and solve a subtraction word problem using 487 and 762. Estimate:

8. Which number lines can you use to find 584 - 221?



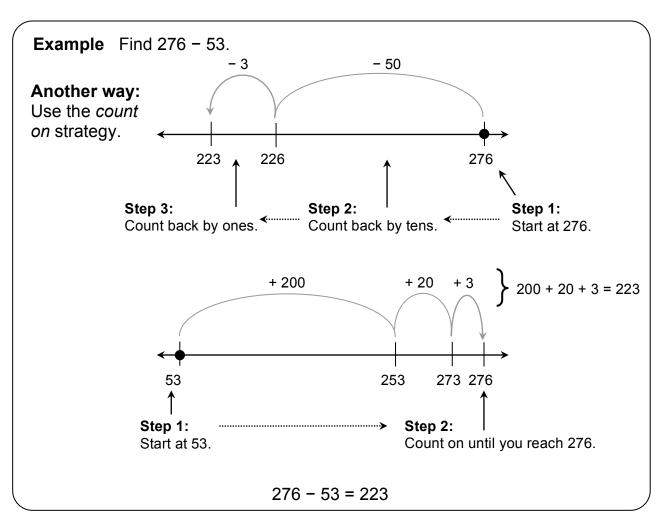
9. You take 132 pictures on a field trip to a museum. Your friend takes 54 pictures. How many more pictures do you take than your friend?

10. Descartes reads 452 pages of a biography. Newton reads 129 pages of the same biography. How many more pages did Descartes read than Newton?

11. A baker has 235 fruit tarts. Some are decorated. 156 fruit tarts are *not* decorated. How many fruit tarts are decorated?

Lesson 8.7

Reteach



Find the sum. Check whether your answer is reasonable.

1. Estimate:



2. Estimate:





Enrichment and Extension

1. Some students visited their school library one day. 117 of them visited in the morning and 262 of them visited in the afternoon. 138 students checked out a library book. How many students did *not* check out a library book?

2. There are some guests at a wedding. 363 guests arrive early and 564 guests arrive on time. 497 guests eat a piece of wedding cake. How many guests do *not* eat a piece of wedding cake?

3. An office building has 2 floors. 598 workers are on the top floor and 256 are on the bottom floor. 378 workers have a coffee mug. How many workers do *not* have a coffee mug?

Lesson 8.8 Daily Skills Practice For use before Lesson 8.8

1. A grocer stacks in 8 rows. Each row has 2 cans. The next day, 2 of the cans are sold. How many cans are left?

The area is ____ cans left.



1. Write what you know about this phrase. Give an example.

Distributive Property (with addition)

Prerequisite Skills Practice For use before Lesson 8.8 Lesson

1. Use the *count back* strategy to find 294 – 63.



2. Use the *count on* strategy to find 371 – 87.





Extra Practice

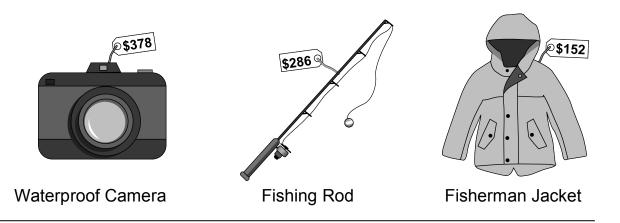
Use compensation to find the difference.

Use mental math to find the difference.

15. To find 342 – 138, Newton adds 3 to each number, and then subtracts. To find the difference, Descartes adds 2 to each number, and then subtracts. Will they both get the correct answer? Explain.

16. A custodian has 450 lockers to clean. She cleans 187 lockers on the first floor and 236 lockers on the second floor. Does she clean all of the lockers?

17. A fisherman has \$650 to spend on new gear. She buys the waterproof camera. Does she have enough money left for either of the other two items? If so, which one?



How much more money does the fisherman need to buy both the fishing rod and the fisherman jacket?

Name _____

Reteach

Example Find 374 – 137. + 3 374 377 One way: Use compensation to - 137 + 3 - 140 change both numbers. 237 Remember to change both numbers by the same amount. So, 374 - 137 = 237. You subtracted **Another way:** 374 374 234 3 more than Use compensation 3 137, so you + 3 - 140 - 137 to change one must add 3 to number. the answer. 234 237 Think: How can you change one

number to make the subtraction easier?

Use compensation to find the difference.

So, 374 - 137 = 237.



Enrichment and Extension

1. The Big Ben Clock Tower has 334 steps. A visitor climbs 176 steps, takes a break, and then climbs 85 more steps. How many more steps does the visitor still need to climb to reach the top of the tower?

2. The Calgary Tower has 802 steps. A visitor climbs 393 steps, takes a break, then climbs 122 more steps. How many more steps does the visitor still need to climb to reach the top of the tower?

3. The Washington Monument has 898 steps. A visitor climbs 227 steps, takes a break, and then climbs 451 more steps. How many more steps does the visitor still need to climb to reach the top of the monument?

Lesson 8.9 Daily Skills Practice For use before Lesson 8.9

1. Find the missing divisor.



1. Write what you know about this phrase. Give an example.

fact family

Prerequisite Skills Practice For use before Lesson 8.9

1. Round to the nearest ten to estimate the difference.

87 →	
- 49 → -	

2. Round to the nearest hundred to estimate the difference.

376	\longrightarrow	
- 131	→ -	

Lesson 8.9

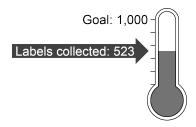
Extra Practice

Find the difference. Check whether your answer is reasonable.

13. Your friend says that you *never* have to regroup when you subtract from a number that ends in a 9. Is your friend correct? Explain.

14. How many more soup can labels does the school need to reach the goal?

School Soup Can Label Collection



15. Newton wants to buy a dog house that costs \$347. He saves \$136 each month for 2 months. How much money does he still need to save?

16. Descartes wants to buy a refrigerator that costs \$839. He saves \$284 each month for 2 months. How much money does he still need to save?

17. Find the missing digits.

Lesson 8.9

Reteach

Example Find 592 – 274. Check whether your answer is reasonable.

$$592 \longrightarrow 590$$

$$-274 \longrightarrow -270$$

Remember to regroup if there are not enough ones or tens to subtract.



320 The difference is about 320.

Subtract.

Regroup the tens.

318 is close to 320, so the answer is reasonable.

Step 1: Estimate.
Round each
number to the
nearest ten.

Step 2: Find the difference. Subtract the ones, then the tens, then the hundreds.

Step 3: Check.

Find the difference. Check whether your answer is reasonable.

1. Estimate: _____

2. Estimate: _____

3. Estimate:

4. Estimate: _____

5. Estimate: _____

6. Estimate

	433
-	67

Lesson 8.9

Enrichment and Extension

1.	Which two 3-digit numbers have a difference whose ones digi	t
	is 1? Explain	

2. Which two 3-digit numbers have a difference whose hundreds digit is 2? Explain.

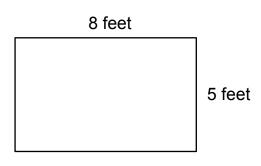
3. Which two 3-digit numbers have a difference whose hundreds digits is 3? Explain.

4. Which two 3-digit numbers have a difference whose tens digit is 0? Explain.

5. Which two 3-digit numbers have a difference whose tens digit is 8? Explain.

Lesson 8.10 Daily Skills Practice For use before Lesson 8.10

1. Find the area of the rectangle.



The area is _____ square feet.



1. Write what you know about this phrase. Give an example.

unit square

Prerequisite Skills Practice For use before Lesson 8.10 Lesson

Find the sum or difference. Check whether your answer is reasonable.

1. Estimate:	2. Estimate:
638	557
– 159	+ 226

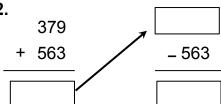
Lesson

Extra Practice

Find the sum or difference. Use the inverse operation to check.

1.

2.



3.

4.

5.

6.

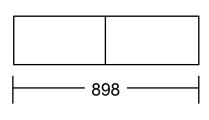
7.

8.

9. Your friend uses an inverse operation to check her answer. Is your friend correct? Explain.

238	238
+ 144	_ 144
382	94

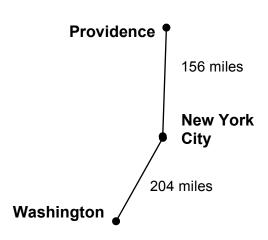
10. Which does not belong with the other three?



527	_	150	=	37	ı

371	156		
527			

- **11.** A winter parka costs \$267. A customer pays \$159 for the winter parka after using a gift card. How much money is the gift card worth?
- **12.** A large suitcase costs \$482. A customer pays \$248 for the suitcase after using a gift card. How much money is the gift card worth?
- 13. A train travels from Providence to Washington. On the way back, the train stops in New York City. How many miles has the train traveled? How many miles does the train have left to travel?



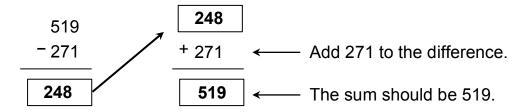
Lesson

Reteach

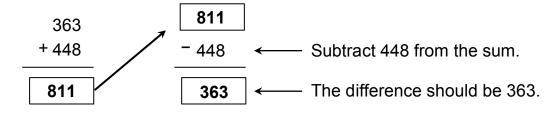
Inverse operations are operations that "undo" each other.

Multiplication and division are inverse operations.

Example Find 519 – 271. Use the inverse operation to check.



Example Find 363 + 448. Use the inverse operation to check.

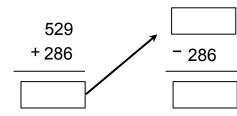


Find the sum or difference. Use the inverse operation to check.

1.



2.



3.

4.

Lesson 8.10

Enrichment and Extension

1. Newton and Descartes buy a trampoline together for \$362. Newton pays \$128. Descartes pays \$141 for the rest of the cost after using a gift card. How much money is Descartes's gift card worth?

2. Newton and Descartes buy a mountain bike together for \$829. Newton pays \$527. Descartes pays \$174 for the rest of the cost after using a gift card. How much money is Descartes's gift card worth?

3. Newton and Descartes buy a canoe together for \$787. Newton pays \$352. Descartes pays \$196 for the rest of the cost after using a gift card. How much money is Descartes's gift card worth?

4. Newton and Descartes buy a go-kart together for \$941. Newton pays \$475. Descartes pays \$129 for the rest of the cost after using a gift card. How much money is Descartes's gift card worth?

Lesson 8.11 Daily Skills Practice For use before Lesson 8.11

1. Find the quotient.



1. Write what you know about this word. Give an example.

dividend

Prerequisite Skills Practice For use before Lesson 8.11

1. There are three candidates in an election. Candidate A receives 241 fewer votes than Candidate B. Who wins the election?

Candidate	Number of Votes
Α	395
В	?
С	642

Extra Practice

Write equations to solve. Use letters to represent the unknown numbers. Check whether your answer is reasonable.

1. Newton has 568 tokens, and Descartes has 263. They use a total of 314 tokens. How many tokens do they have now?

2. There are 173 first graders and 154 second graders at a school fair. There are 245 more adults than students at the fair. How many adults are at the fair?

3. There are 267 second graders and 338 third graders at a track competition. There are 272 more adults than students at the competition. How many adults are at the competition?

4. You received 163 votes in a drawing contest. Your friend received 58 fewer votes than you. How many people voted for you and your friend in all?

5. Write and solve a two-step problem that can be solved using addition or subtraction.

6. How many more apples were picked on Friday than on Saturday and Sunday combined?

Apple Picking				
Day	Number of Apples Picked			
Friday	516			
Saturday	239			
Sunday	182			

7. How many more people used the train on Sunday than on Friday and Saturday combined?

Explain how you can check whether your answer is reasonable.

Train I	Passengers
Day	Number of Passengers
Friday	583
Saturday	226
Sunday	957

Lesson 8.11

Reteach

Example A chef makes 539 salads. She sells 272 of them. Then she makes 136 more. How many salads does she have now?

1. Understand the Problem

What do you know?

Hint: Look for the numbers in the problem.

- The chef has 539 salads.
- She sells 272 of them.
- She makes 136 more.

What do you need to find?

Hint: Look for the question in the problem.

 How many salads does she have now?

2. Make a Plan

How will you solve?

- Subtract 272 from 539 to find out how many salads she has left after she sells some.
- Then add 136 to the difference to find out how many she has now.

3. Solve

Draw a part-part-whole model and write an equation. Use a letter to represent the unknown number.

The chef has 403 salads now.

1. The chef sells 313 salads and makes 68 more. How many salads does she have now?

Lesson

Enrichment and Extension

1. You are traveling to a campground that is 376 miles away. You travel 88 miles in the morning, 172 miles in the afternoon, and 53 miles in the evening. How many more miles do you need to travel before you get to the campground?

2. You are traveling to an amusement park that is 449 miles away. You travel 137 miles in the morning, 156 miles in the afternoon, and 68 miles in the evening. How many more miles do you need to travel before you get to the amusement park?

3. You are traveling to a national park that is 812 miles away. You travel 289 miles on the first day, 226 miles on the second day, and 183 miles on the third day. How many more miles do you need to travel before you get to the national park?

4. You are traveling to a book fair that is 983 miles away. You travel 337 miles on the first day, 149 miles on the second day, 262 miles on the third day, and 64 miles on the fourth day. How many more miles do you need to travel before you get to the book fair?



Chapter Self-Assessment

Use the scale below to rate your understanding of the learning target and the success criteria.

1 2 3 4

		Rating		
8.1 Identify Addition Properties				
Learning Target: Identify and use addition properties.	1	2	3	4
I can identify the Associative and Commutative Properties of Addition.	1	2	3	4
I can identify the Addition Property of Zero.	1	2	3	4
I can use an addition property to find a sum.	1	2	3	4
I can explain what the addition properties mean.	1	2	3	4
8.2 Use Number Lines to Add				
Learning Target: Use a number line to find a sum.	1	2	3	4
I can use the <i>count on</i> strategy to add on a number line.	1	2	3	4
I can use the <i>make a ten</i> strategy to add on a number line.	1	2	3	4
8.3 Use Mental Math to Add				
Learning Target: Use mental math to find a sum.	1	2	3	4
I can use compensation to add.	1	2	3	4
I can use the <i>make a ten</i> strategy to add.	1	2	3	4
I can explain how to change one addend to a decade number or compatible number.	1	2	3	4
8.4 Use Partial Sums to Add				
Learning Target: Use partial sums to find a sum.	1	2	3	4
I can write addends in expanded form.	1	2	3	4
I can add to find the hundreds, tens, and ones.	1	2	3	4
I can add the partial sums.	1	2	3	4
8.5 Add Three-Digit Numbers				
Learning Target: Add three-digit numbers.	1	2	3	4
I can round to estimate a sum.	1	2	3	4
I can add three-digit numbers.	1	2	3	4
I can use an estimate to check whether my answer is reasonable.	1	2	3	4

	Rating			
8.6 Add Three or More Numbers				
Learning Target: Add up to four numbers.	1	2	3	4
I can round to estimate a sum.	1	2	3	4
I can identify compatible numbers.	1	2	3	4
I can find a sum and check whether it is reasonable.	1	2	3	4
8.7 Use Number Lines to Subtract				
Learning Target: Use a number line to find a difference.	1	2	3	4
I can use the <i>count back</i> strategy to subtract on a number line.	1	2	3	4
I can use the <i>count on</i> strategy to subtract on a number line.	1	2	3	4
8.8 Use Mental Math to Subtract				
Learning Target: Use mental math to find a difference.	1	2	3	4
I can explain how to change both numbers to use compensation to subtract.	1	2	3	4
I can explain how to change one number to use compensation to subtract.	1	2	3	4
8.9 Subtract Three-Digit Numbers				
Learning Target: Subtract three-digit numbers.	1	2	3	4
I can round to estimate a difference.	1	2	3	4
I can subtract three-digit numbers.	1	2	3	4
I can use an estimate to check whether my answer is reasonable.	1	2	3	4
8.10 Relate Addition and Subtraction				
Learning Target: Use inverse operations to check answers.	1	2	3	4
I can use addition to check a difference.	1	2	3	4
I can use subtraction to check a sum.	1	2	3	4
I can explain the relationship between addition to subtraction.	1	2	3	4
8.11 Problem Solving: Addition and Subtraction				
Learning Target: Use the problem-solving plan to solve two-step addition and subtraction word problems.	1	2	3	4
I can understand a problem.	1	2	3	4
I can make a plan to solve a problem using letters to represent the unknown numbers.	1	2	3	4
I can solve a problem and check whether my answer is reasonable.	1	2	3	4