

Lesson
8.1**Reteach**

$$\left. \begin{array}{r} 2 + 4 = 4 + 2 \\ \downarrow \quad \quad \downarrow \\ 6 = 6 \end{array} \right\}$$

Commutative Property of Addition

Changing the order of addends does not change the sum.

$$\left. \begin{array}{r} (3 + 4) + 2 = 4 + (3 + 2) \\ \downarrow \quad \quad \downarrow \\ 7 + 2 = 4 + 5 \\ \downarrow \quad \quad \downarrow \\ 9 = 9 \end{array} \right\}$$

Associative Property of Addition

Changing the grouping of addends does not change the sum.

$$\left. \begin{array}{r} 5 + 0 = 5 \\ \downarrow \quad \quad \downarrow \\ 5 = 5 \end{array} \right\}$$

Addition Property of Zero

The sum of any number and 0 is that number.

Identify the property.

1. $0 + 13 = 13$

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

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

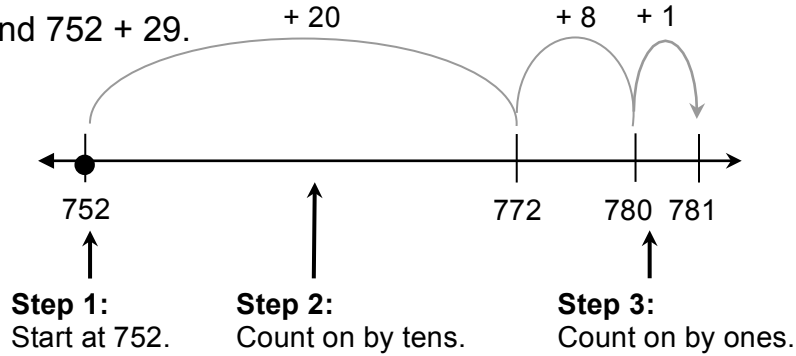
4. $89 + 43 = 43 + 89$

Lesson
8.2

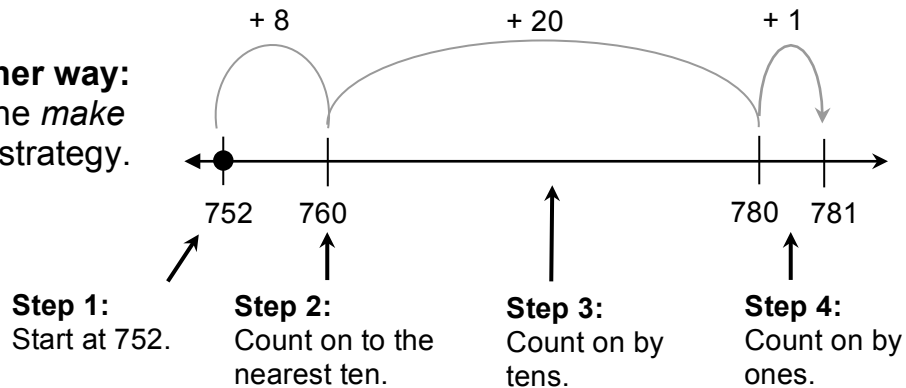
Reteach

Example Find $752 + 29$.

One way:
Use the *count on* strategy.

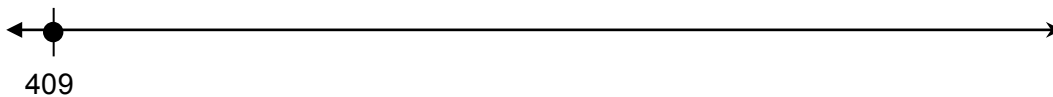


Another way:
Use the *make a ten* strategy.



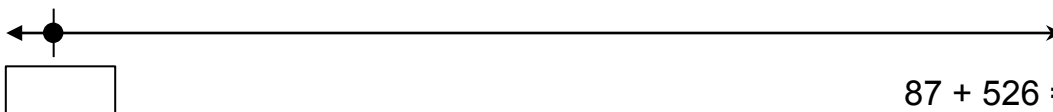
$752 + 29 = 781$

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



$409 + 65 = \underline{\hspace{2cm}}$

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



$87 + 526 = \underline{\hspace{2cm}}$

Lesson

8.3

Reteach

Example Find $152 + 483$.

Use compensation to add.

Think: How can I make a ten?

$$\begin{array}{r} 152 \\ + 438 \\ \hline \end{array} \begin{array}{l} - 2 \\ + 2 \end{array} \longrightarrow \begin{array}{r} 150 \\ + 440 \\ \hline \end{array}$$


590

So, $152 + 438 = 590$.

Example Find $387 + 316$.

Make a ten and count on to add.

Think: What is the next ten after 387?



$$\begin{aligned} 387 + 316 &= 387 + (3 + 300 + 10 + 3) \\ &= \underline{390} + 300 + 10 + 3 \\ &= \underline{690} + 10 + 3 \\ &= \underline{700} + 3 \\ &= \underline{703} \end{aligned}$$

So, $387 + 316 = 703$.

1. Use compensation to find

$246 + 489.$

$$\begin{array}{r} 246 \\ + 489 \\ \hline \end{array} \begin{array}{l} + \quad \underline{\quad\quad} \\ - \quad \underline{\quad\quad} \end{array} \longrightarrow \begin{array}{r} 250 \\ + 485 \\ \hline \end{array}$$

So, $246 + 489 = \underline{\quad\quad\quad}$.

2. Make a ten and count on to find

$167 + 454.$

$$\begin{aligned} 167 + 454 &= 287 + (3 + 400 + 50 + 1) \\ &= \underline{\quad\quad} + 400 + 50 + 1 \\ &= \underline{\quad\quad} + 50 + 1 \\ &= \underline{\quad\quad} + 1 \\ &= \underline{\quad\quad} \end{aligned}$$

Lesson
8.4
Reteach
Example Find $309 + 538$.

$$\begin{array}{r} 309 = \boxed{300} + \boxed{} + \boxed{9} \\ + 538 = \boxed{500} + \boxed{30} + \boxed{8} \end{array}$$

Step 1: Write each number in expanded form.

$$\underline{800} + \underline{30} + \underline{17}$$

Step 2: Find the partial sums.

$$800 + 30 + 17 = \boxed{847}$$

Step 3: Add the partial sums.

 So, $309 + 538 = 847$.

Use partial sums to add.

$$\begin{array}{r} 1. \quad 264 = \boxed{} + \boxed{} + \boxed{} \\ + 618 = \boxed{} + \boxed{} + \boxed{} \end{array}$$

$$\underline{} + \underline{} + \underline{} = \underline{} \quad \text{So, } 264 + 618 = \underline{}.$$

$$\begin{array}{r} 2. \quad 417 = \boxed{} + \boxed{} + \boxed{} \\ + 334 = \boxed{} + \boxed{} + \boxed{} \end{array}$$

$$\underline{} + \underline{} + \underline{} = \underline{} \quad \text{So, } 417 + 334 = \underline{}.$$

$$\begin{array}{r} 3. \quad 298 \\ + 229 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 778 \\ + 123 \\ \hline \end{array}$$

Lesson
8.5 **Reteach**

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

$$\begin{array}{r} 524 \longrightarrow 525 \\ + 182 \longrightarrow + 175 \\ \hline \end{array}$$

700 The sum is *about* 700.

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



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

$$\begin{array}{r} \boxed{1} \\ 524 \\ + 182 \\ \hline 706 \end{array}$$

Step 1: Use compatible numbers to estimate the sum.

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

Step 3: Check.

Find the sum. Check whether your answer is reasonable.

1. Estimate: _____

$$\begin{array}{r} 536 \\ + 262 \\ \hline \end{array}$$

2. Estimate: _____

$$\begin{array}{r} 187 \\ + 493 \\ \hline \end{array}$$

3. Estimate: _____

$$\begin{array}{r} 644 \\ + 319 \\ \hline \end{array}$$

4. Estimate: _____

$$\begin{array}{r} 173 \\ + 154 \\ \hline \end{array}$$

5. Estimate: _____

$$\begin{array}{r} 407 \\ + 454 \\ \hline \end{array}$$

6. Estimate: _____

$$\begin{array}{r} 569 \\ + 43 \\ \hline \end{array}$$

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.

$$\begin{array}{r} 209 \longrightarrow 210 \\ 127 \longrightarrow 130 \\ + 253 \longrightarrow 250 \\ \hline \end{array}$$

590

The sum is *about* 590.

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

$$\begin{array}{r} \boxed{1} \\ 209 \\ 127 \\ + 253 \\ \hline 589 \end{array}$$

Think: $7 + 3 = 10$

Step 3: Check.

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

Find the sum. Check whether your answer is reasonable.

1. Estimate: _____

$$\begin{array}{r} 366 \\ 62 \\ + 98 \\ \hline \end{array}$$

2. Estimate: _____

$$\begin{array}{r} 176 \\ 379 \\ + 198 \\ \hline \end{array}$$

3. Estimate: _____

$$\begin{array}{r} 67 \\ 332 \\ + 261 \\ \hline \end{array}$$

4. Estimate: _____

$$\begin{array}{r} 325 \\ 213 \\ 229 \\ + 171 \\ \hline \end{array}$$

5. Estimate: _____

$$\begin{array}{r} 526 \\ 188 \\ 104 \\ + 43 \\ \hline \end{array}$$

6. Estimate

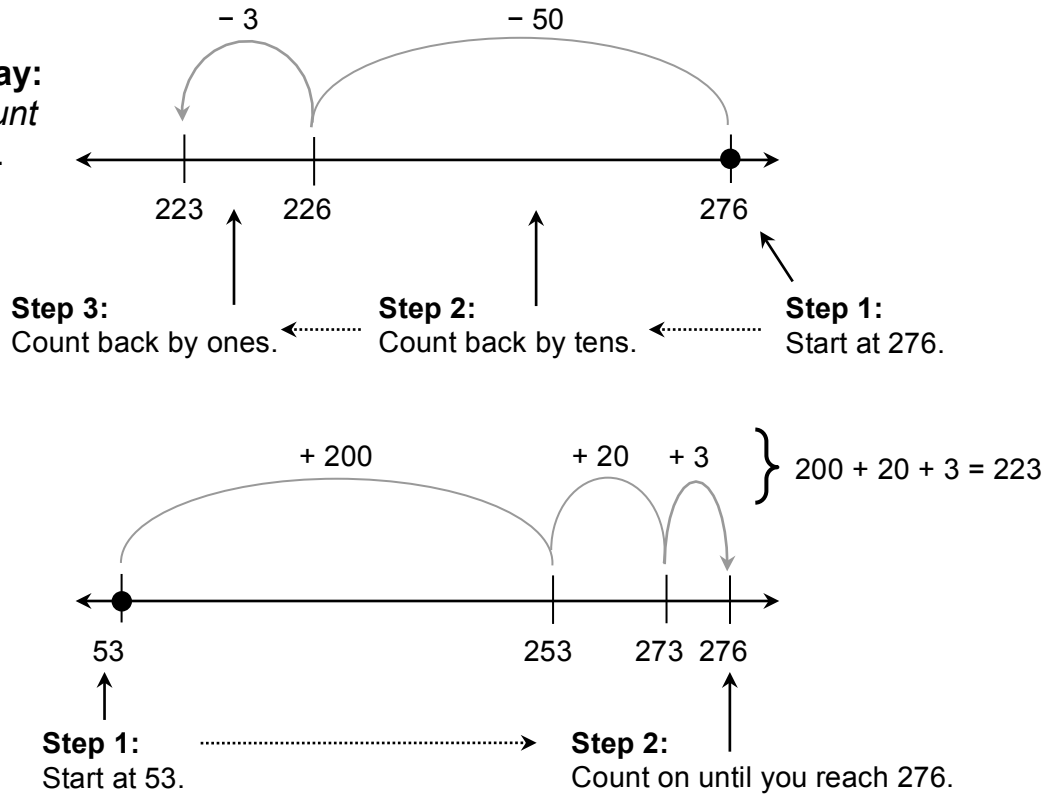
$$\begin{array}{r} 224 \\ 415 \\ 189 \\ + 137 \\ \hline \end{array}$$

Lesson
8.7

Reteach

Example Find $276 - 53$.

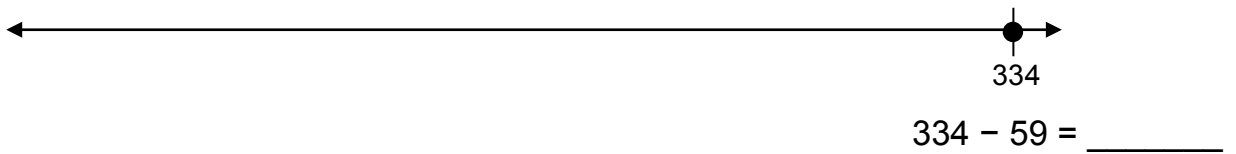
Another way:
Use the *count on* strategy.



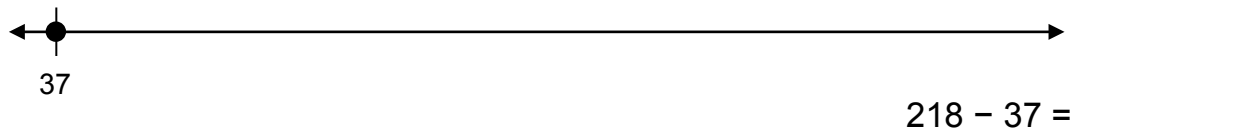
$276 - 53 = 223$

Find the sum. Check whether your answer is reasonable.

1. Estimate:



2. Estimate:



Lesson
8.8

Reteach

Example Find $374 - 137$.

One way:

Use compensation to change both numbers.

$$\begin{array}{r} 374 \\ - 137 \\ \hline \end{array} \begin{array}{l} + 3 \\ + 3 \end{array} \longrightarrow \begin{array}{r} 377 \\ - 140 \\ \hline \end{array}$$

237

So, $374 - 137 = 237$.



Remember to change both numbers by the same amount.

Another way:

Use compensation to change one number.

$$\begin{array}{r} 374 \\ - 137 \\ \hline \end{array} \begin{array}{l} + 3 \\ \end{array} \longrightarrow \begin{array}{r} 374 \\ - 140 \\ \hline 234 \end{array}$$

You subtracted 3 more than 137, so you must add 3 to the answer.

$$\begin{array}{r} 234 \\ + \quad 3 \\ \hline 237 \end{array}$$

So, $374 - 137 = 237$.



Think: How can you change one number to make the subtraction easier?

Use compensation to find the difference.

1.
$$\begin{array}{r} 462 \\ - 227 \\ \hline \end{array} \begin{array}{l} + \quad \quad \\ + \quad \quad \end{array} \longrightarrow \begin{array}{r} 465 \\ - 220 \\ \hline \end{array}$$

So, $462 - 227 = \underline{\quad}$.

2.
$$\begin{array}{r} 591 \\ - 175 \\ \hline \end{array} \begin{array}{l} + \quad \quad \\ + \quad \quad \end{array} \longrightarrow \begin{array}{r} 596 \\ - 180 \\ \hline \end{array}$$

So, $591 - 175 = \underline{\quad}$.

3.
$$\begin{array}{r} 683 \\ - 296 \\ \hline \end{array} \longrightarrow \begin{array}{r} 683 \\ - 300 \\ \hline 383 \end{array}$$

$$\begin{array}{r} 383 \\ + \quad \quad \\ \hline \end{array}$$

So, $683 - 296 = \underline{\quad}$.

Lesson
8.9

Reteach

Example Find $592 - 274$. Check whether your answer is reasonable.

$$\begin{array}{r} 592 \longrightarrow 590 \\ -274 \longrightarrow -270 \\ \hline \end{array}$$

320 The difference is *about* 320.

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



Regroup the tens.

$$\begin{array}{r} 812 \\ 5\cancel{9}\cancel{2} \\ + 274 \\ \hline \end{array}$$

Subtract.

$$\begin{array}{r} 812 \\ 5\cancel{9}\cancel{2} \\ + 274 \\ \hline 318 \end{array}$$

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

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

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

Step 3: Check.

Find the difference. Check whether your answer is reasonable.

1. Estimate: _____

$$\begin{array}{r} 815 \\ - 206 \\ \hline \end{array}$$

2. Estimate: _____

$$\begin{array}{r} 734 \\ - 549 \\ \hline \end{array}$$

3. Estimate: _____

$$\begin{array}{r} 581 \\ - 168 \\ \hline \end{array}$$

4. Estimate: _____

$$\begin{array}{r} 692 \\ - 314 \\ \hline \end{array}$$

5. Estimate: _____

$$\begin{array}{r} 954 \\ - 185 \\ \hline \end{array}$$

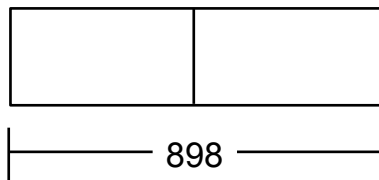
6. Estimate

$$\begin{array}{r} 433 \\ - 67 \\ \hline \end{array}$$

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

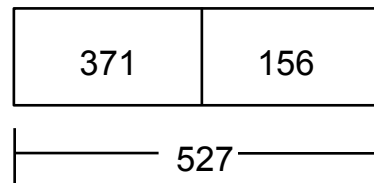
238	238
+ 144	- 144
-----	-----
382	94

10. Which does *not* belong with the other three?



$$527 - 371 = 156$$

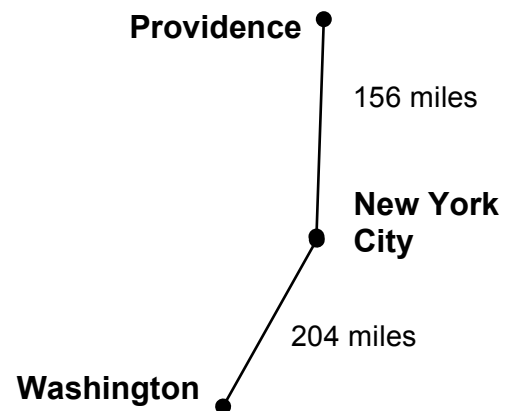
$$527 - 156 = 371$$



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
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.

Step 1:

272	s	s is the unknown difference.	539	s = 267
539			- 272	
			267	

$539 - 272 = s$

Step 2:

s = 267	136	n is the unknown sum.	267	n = 403
n			+ 136	
			403	

$267 + 136 = n$

The chef has
403 salads
now.

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