

Lesson**8.1****Reteach**

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

Commutative Property of Addition

Changing the order of addends does not change the sum.

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

Associative Property of Addition

Changing the grouping of addends does not change the sum.

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

Addition Property of Zero

The sum of any number and 0 is that number.

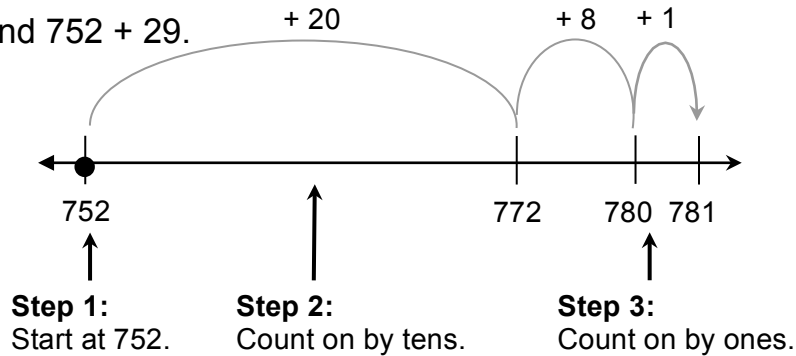
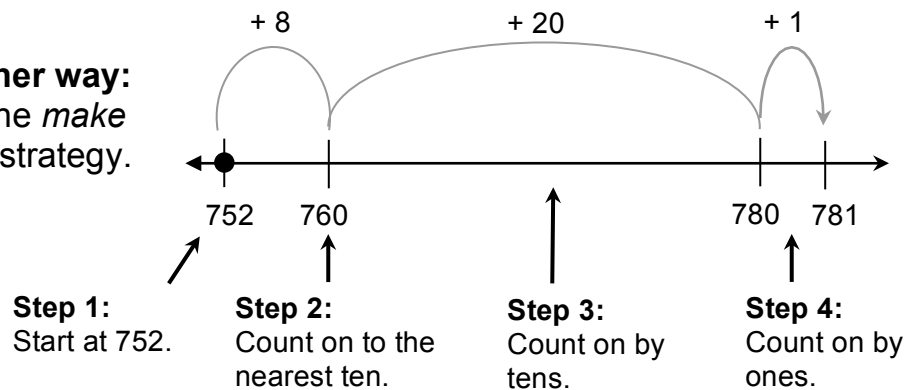
Identify the property.

1. $0 + 13 = 13$

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

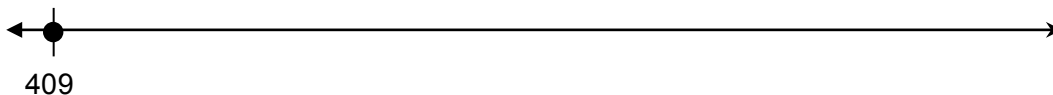
3. $(43 + 75) + 14 = 43 + (75 + 14)$

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.

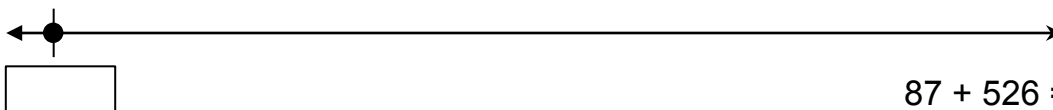
$$752 + 29 = 781$$

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?

$$\begin{array}{r}
 152 \quad - \quad 2 \\
 + 438 \quad + \quad 2 \\
 \hline
 \end{array}
 \longrightarrow
 \begin{array}{r}
 150 \\
 + 440 \\
 \hline
 \boxed{590}
 \end{array}$$

So, $152 + 438 = 590$.**Example** Find $387 + 316$.

Make a ten and count on to add.

Think: What is the next ten after 387?

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

So, $387 + 316 = 703$.**1.** Use compensation to find

$246 + 489$.

$$\begin{array}{r}
 246 \quad + \quad \underline{\hspace{2cm}} \\
 + 489 \quad - \quad \underline{\hspace{2cm}} \\
 \hline
 \end{array}
 \longrightarrow
 \begin{array}{r}
 250 \\
 + 485 \\
 \hline
 \boxed{\hspace{2cm}}
 \end{array}$$

So, $246 + 489 = \underline{\hspace{2cm}}$.**2.** Make a ten and count on to find

$167 + 454$.

$$\begin{aligned}
 167 + 454 &= 287 + (3 + 400 + 50 + 1) \\
 &= \underline{\hspace{2cm}} + 400 + 50 + 1 \\
 &= \underline{\hspace{2cm}} + 50 + 1 \\
 &= \underline{\hspace{2cm}} + 1 \\
 &= \underline{\hspace{2cm}}
 \end{aligned}$$

Name _____

Lesson

8.4

Reteach

Example Find $309 + 538$.

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

Step 1: Write each number in expanded form.

$$\begin{array}{r} 800 + 30 + 17 \\ \hline \end{array}$$

Step 2: Find the partial sums.

$$800 + 30 + 17 =$$

Step 3: Add the partial sums.

So, $309 + 538 = 847$.

Use partial sums to add.

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

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

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

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

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

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

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.

Step 1: Use compatible numbers to estimate the sum.

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

$$\begin{array}{r} \boxed{1} \\ 5 \ 2 \ 4 \\ + 1 \ 8 \ 2 \\ \hline 7 \ 0 \ 6 \end{array}$$

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: _____

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

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.

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

590

The sum is
about 590.**Step 2:** Find the sum.
Add the ones, then the
tens, then the hundreds.

$$\begin{array}{r}
 \boxed{1} \\
 2 \ 0 \ 9 \\
 1 \ 2 \ 7 \\
 + 2 \ 5 \ 3 \\
 \hline
 5 \ 8 \ 9
 \end{array}
 \quad \begin{array}{l} \text{Think: } 7 + 3 = 10 \end{array}$$

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: _____

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

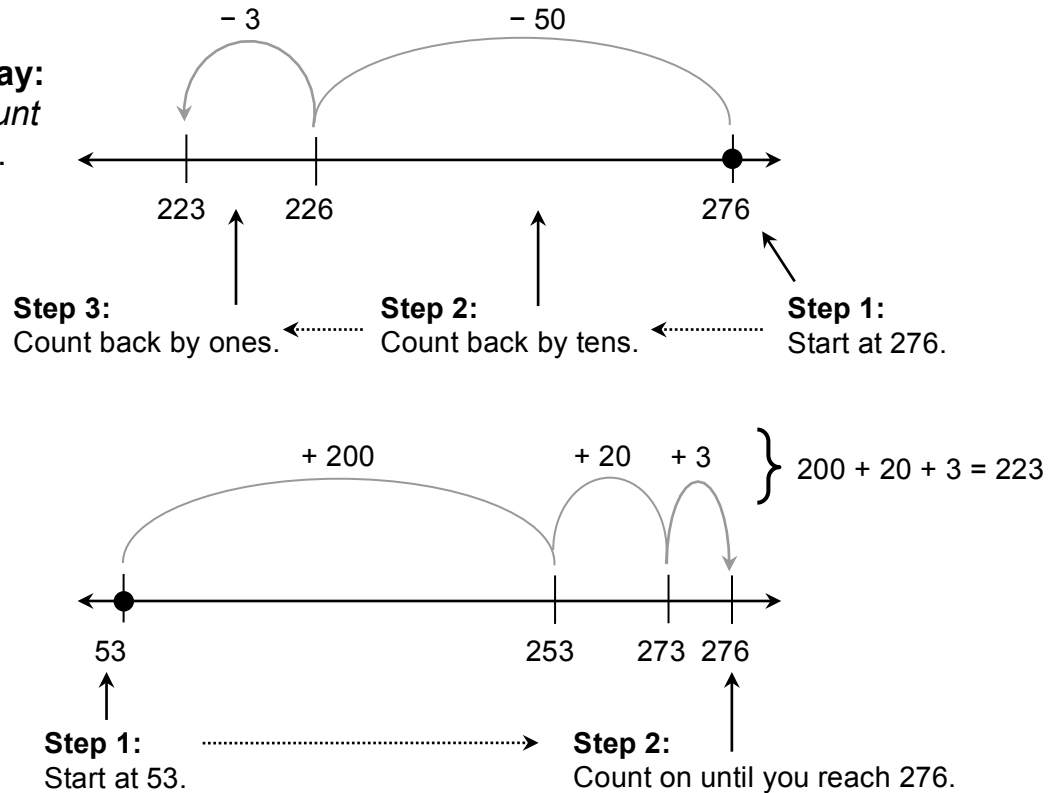
6. Estimate

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

Lesson
8.7
Reteach

Example Find $276 - 53$.

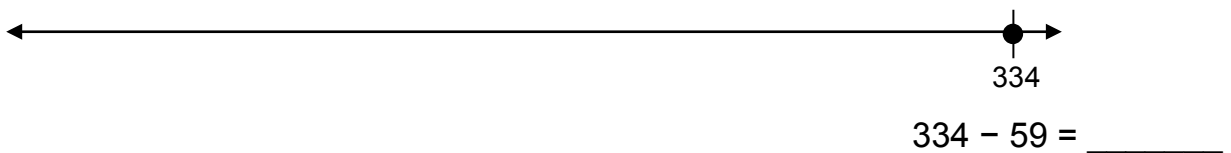
Another way:
Use the *count on* strategy.



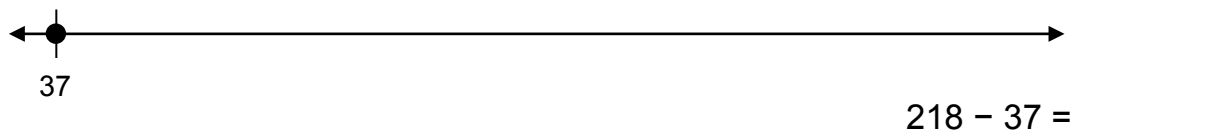
$$276 - 53 = 223$$

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.

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

237

So, $374 - 137 = 237$.


Remember to change both numbers by the same amount.

Another way:

Use compensation to change one number.

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

234

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

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

237

So, $374 - 137 = 237$.


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

Use compensation to find the difference.

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

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

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

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

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

383

$$\begin{array}{r} 3 \quad 8 \quad 3 \\ + \quad \quad \square \\ \hline \end{array}$$

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

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.

$$\begin{array}{r} 8 \quad 12 \\ 5 \quad \cancel{9} \quad \cancel{2} \\ + 2 \quad 7 \quad 4 \\ \hline \end{array}$$

Subtract.

$$\begin{array}{r} 8 \quad 12 \\ 5 \quad \cancel{9} \quad \cancel{2} \\ + 2 \quad 7 \quad 4 \\ \hline 3 \quad 1 \quad 8 \end{array}$$

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: _____

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

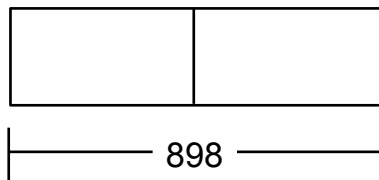
6. Estimate

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

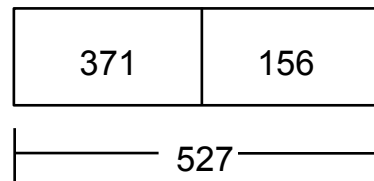
9. Your friend uses an inverse operation to check her answer. Is your friend correct? Explain.

238	238
+ 144	- 144
<hr/>	<hr/>
382	94

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



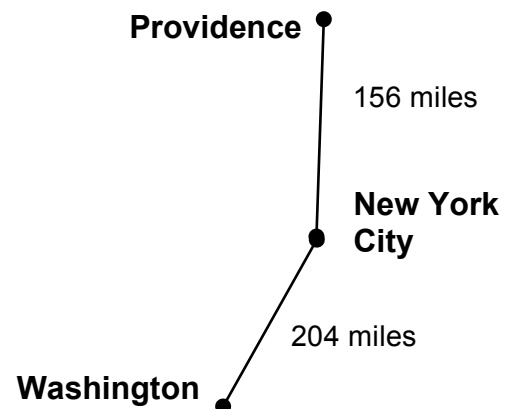
$$527 - 156 = 371$$



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
539	

$$539 - 272 = s$$

s is the unknown difference.

$$\begin{array}{r} 539 \\ - 272 \\ \hline 267 \end{array} \quad s = 267$$

Step 2:

s = 267	136
n	

$$267 + 136 = n$$

n is the unknown sum.

$$\begin{array}{r} 267 \\ + 136 \\ \hline 403 \end{array} \quad n = 403$$

The chef has 403 salads now.

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