

**Lesson**  
**8.1****Reteach**

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

**Commutative Property of Addition**

Changing the order of addends does not change the sum.

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

**Associative Property of Addition**

Changing the grouping of addends does not change the sum.

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

**Addition Property of Zero**

The sum of any number and 0 is that number.

Identify the property.

1.  $0 + 13 = 13$

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

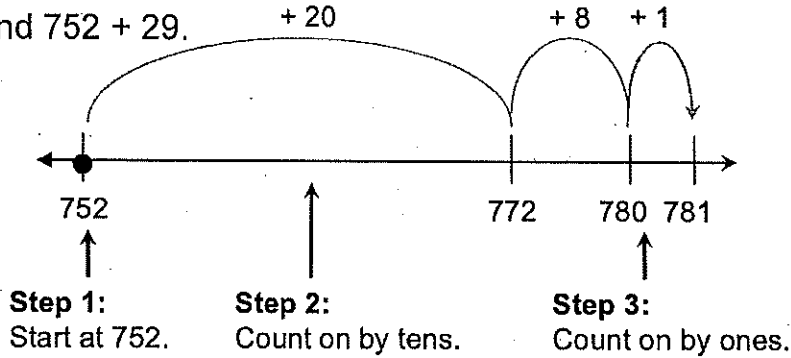
3.  $(43 + 75) + 14 = 43 + (75 + 14)$

4.  $89 + 43 = 43 + 89$

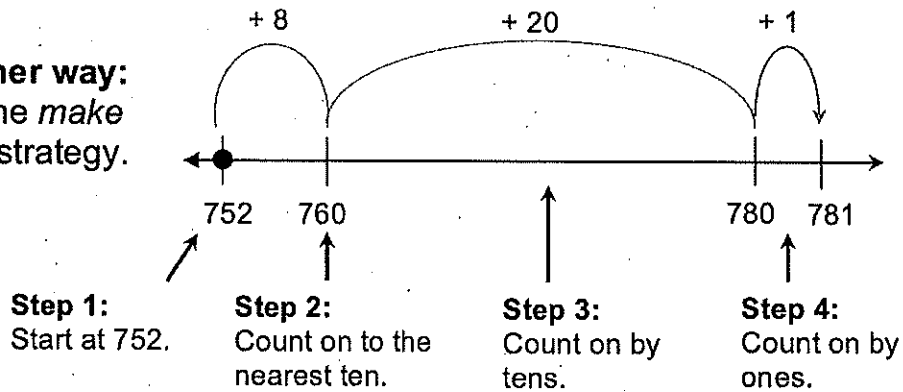
**Lesson 8.2** Reteach

**Example** Find  $752 + 29$ .

**One way:**  
Use the *count on* strategy.

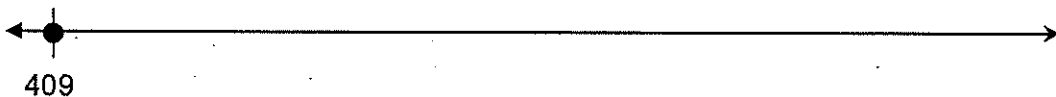


**Another way:**  
Use the *make a ten* strategy.



$752 + 29 = 781$

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?

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

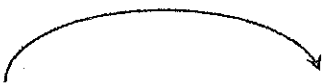
590

So,  $152 + 438 = 590$ .

**Example** Find  $387 + 316$ .

Make a ten and count on to add.

**Think:** What is the next ten after 387?



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

So,  $387 + 316 = 703$ .

1. Use compensation to find

$246 + 489$ .

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

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

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  $309 + 538$ .

$$\begin{array}{r} 309 = \boxed{300} + \boxed{\phantom{00}} + \boxed{9} \\ + 538 = \boxed{500} + \boxed{30} + \boxed{8} \end{array}$$

**Step 1:** Write each number in expanded form.

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

**Step 2:** Find the partial sums.

$$800 + 30 + 17 =$$

**Step 3:** Add the partial sums.

So,  $309 + 538 = 847$ .

Use partial sums to add.

$$\begin{array}{r} 1. \quad 264 = \boxed{\phantom{00}} + \boxed{\phantom{00}} + \boxed{\phantom{00}} \\ + 618 = \boxed{\phantom{00}} + \boxed{\phantom{00}} + \boxed{\phantom{00}} \end{array}$$

\_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_ So,  $264 + 618 =$  \_\_\_\_\_.

$$\begin{array}{r} 2. \quad 417 = \boxed{\phantom{00}} + \boxed{\phantom{00}} + \boxed{\phantom{00}} \\ + 334 = \boxed{\phantom{00}} + \boxed{\phantom{00}} + \boxed{\phantom{00}} \end{array}$$

\_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_ So,  $417 + 334 =$  \_\_\_\_\_.

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

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

**Lesson**  
**8.5**

**Reteach**

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

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

700

The sum is *about* 700.

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

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

**Step 1:** Use compatible numbers to estimate the sum.

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

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.

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

590 The sum is *about* 590.

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

$$\begin{array}{r} \boxed{1} \\ 209 \\ + 127 \\ + 253 \\ \hline 589 \end{array} \quad \text{Think: } 7 + 3 = 10$$

**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 \_\_\_\_\_

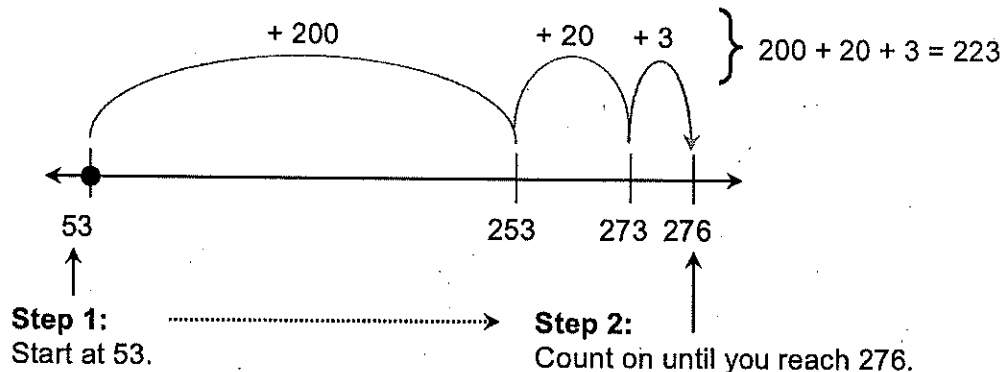
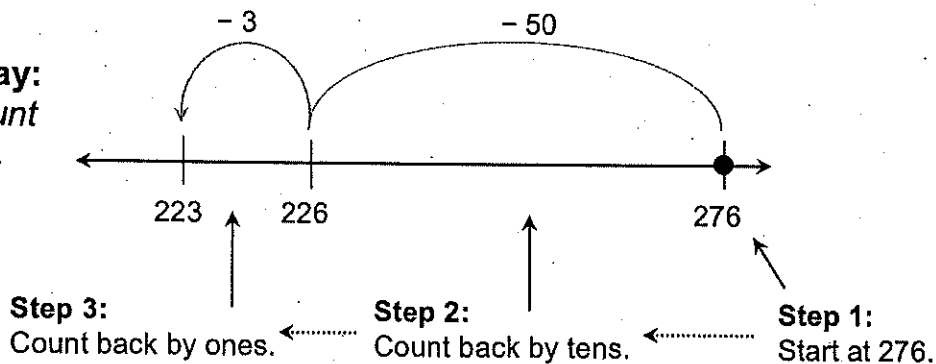
$$\begin{array}{r} 224 \\ 415 \\ 189 \\ + 137 \\ \hline \end{array}$$

**Lesson**  
**8.7**

**Reteach**

**Example** Find  $276 - 53$ .

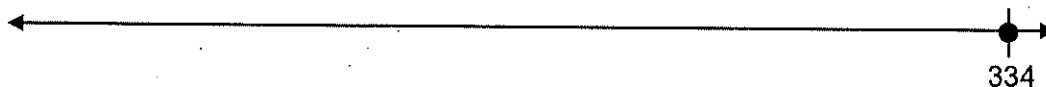
**Another way:**  
Use the *count on* strategy.



$276 - 53 = 223$

Find the sum. Check whether your answer is reasonable.

1. Estimate:



$334 - 59 = \underline{\hspace{2cm}}$

2. Estimate:



$218 - 37 = \underline{\hspace{2cm}}$

**Lesson**  
**8.8**

**Reteach**

**Example** Find  $374 - 137$ .

**One way:**

Use compensation to change both numbers.

$$\begin{array}{r}
 374 + 3 \longrightarrow 377 \\
 - 137 + 3 \longrightarrow - 140 \\
 \hline
 \boxed{237}
 \end{array}$$



Remember to change both numbers by the same amount.

So,  $374 - 137 = 237$ .

**Another way:**

Use compensation to change one number.

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

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

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



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

So,  $374 - 137 = 237$ .

Use compensation to find the difference.

$$\begin{array}{r}
 1. \quad 462 + \underline{\hspace{1cm}} \longrightarrow 465 \\
 - 227 + \underline{\hspace{1cm}} \longrightarrow - 220 \\
 \hline
 \boxed{\hspace{2cm}}
 \end{array}$$

So,  $462 - 227 = \underline{\hspace{2cm}}$ .

$$\begin{array}{r}
 2. \quad 591 + \underline{\hspace{1cm}} \longrightarrow 596 \\
 - 175 + \underline{\hspace{1cm}} \longrightarrow - 180 \\
 \hline
 \boxed{\hspace{2cm}}
 \end{array}$$

So,  $591 - 175 = \underline{\hspace{2cm}}$ .

$$\begin{array}{r}
 3. \quad 683 \longrightarrow 683 \\
 - 296 + \underline{\hspace{1cm}} \longrightarrow - 300 \\
 \hline
 383
 \end{array}$$

$$\begin{array}{r}
 3 \ 8 \ 3 \\
 + \quad \boxed{\hspace{1cm}} \\
 \hline
 \boxed{\hspace{2cm}}
 \end{array}$$

So,  $683 - 296 = \underline{\hspace{2cm}}$ .



**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.                      Subtract.

$$\begin{array}{r} \phantom{0} 8 \phantom{0} 12 \\ 5 \cancel{0} \cancel{2} \\ + 2 \phantom{0} 7 \phantom{0} 4 \\ \hline \end{array} \longrightarrow \begin{array}{r} \phantom{0} 8 \phantom{0} 12 \\ 5 \cancel{0} \cancel{2} \\ + 2 \phantom{0} 7 \phantom{0} 4 \\ \hline 3 \phantom{0} 1 \phantom{0} 8 \end{array}$$

**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

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

**Lesson**  
**8.10****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.

$\begin{array}{r} 519 \\ - 271 \\ \hline \end{array}$	$\nearrow$	$\begin{array}{r} \boxed{248} \\ + 271 \\ \hline \end{array}$	$\longleftarrow$ Add 271 to the difference.
$\boxed{248}$		$\begin{array}{r} \boxed{519} \\ \hline \end{array}$	$\longleftarrow$ The sum should be 519.

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

$\begin{array}{r} 363 \\ + 448 \\ \hline \end{array}$	$\nearrow$	$\begin{array}{r} \boxed{811} \\ - 448 \\ \hline \end{array}$	$\longleftarrow$ Subtract 448 from the sum.
$\boxed{811}$		$\begin{array}{r} \boxed{363} \\ \hline \end{array}$	$\longleftarrow$ The difference should be 363.

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

1.

$\begin{array}{r} 784 \\ - 338 \\ \hline \end{array}$	$\nearrow$	$\begin{array}{r} \boxed{\phantom{000}} \\ + 338 \\ \hline \end{array}$
$\boxed{\phantom{000}}$		$\boxed{\phantom{000}}$

2.

$\begin{array}{r} 529 \\ + 286 \\ \hline \end{array}$	$\nearrow$	$\begin{array}{r} \boxed{\phantom{000}} \\ - 286 \\ \hline \end{array}$
$\boxed{\phantom{000}}$		$\boxed{\phantom{000}}$

3.

$$\begin{array}{r} 193 \\ + 641 \\ \hline \end{array}$$

4.

$$\begin{array}{r} 932 \\ - 565 \\ \hline \end{array}$$

**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.

539	- 272	267	$s = 267$
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**Step 2:**

$s = 267$	136
n	

$267 + 136 = n$

n is the unknown sum.

267	+ 136	403	$n = 403$
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The chef has 403 salads now.

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

