# Grade 3 Chapter 3
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Teacher’s Guide to Using the Chapter 3 Resource Masters

The Chapter 3 Resource Masters includes the core materials needed for Chapter 3. These materials include worksheets, extensions, and assessment options. The answers for these pages appear at the back of this booklet.

All of the materials found in this booklet are included for viewing and printing on the TeacherWorks Plus™ CD-ROM.

Chapter Resources

Graphic Organizer (page 1) This master is a tool designed to assist students with comprehension of grade-level concepts. While the content and layout of these tools vary, their goal is to assist students by providing a visual representation from which they can learn new concepts.

Student Glossary (page 2) This master is a study tool that presents the key vocabulary terms from the chapter. You may suggest that students highlight or star the terms they do not understand. Give this list to students before beginning Lesson 3–1. Remind them to add these pages to their mathematics study notebooks.

Anticipation Guide (page 6) This master is a survey designed for use before beginning the chapter. You can use this survey to highlight what students may or may not know about the concepts in the chapter. There is space for recording how well students answer the questions before they complete the chapter. You may find it helpful to interview students a second time, after completing the chapter, to determine their progress.

Game (page 7) A game is provided to reinforce chapter concepts and may be used at appropriate times throughout the chapter.

Resources for Computational Lessons

Reteach Each lesson has an associated Reteach worksheet. In general, the Reteach worksheet focuses on the same lesson content but uses a different approach, learning style, or modality than that used in the Student Edition. The Reteach worksheet closes with computational practice of the concept.

Skills Practice The Skills Practice worksheet for each lesson focuses on the computational aspect of the lesson. The Skills Practice worksheet may be helpful in providing additional practice of the skill taught in the lesson.

Homework Practice The Homework Practice worksheet provides an opportunity for additional computational practice. The Homework Practice worksheet includes word problems that address the skill taught in the lesson.

Problem-Solving Practice The Problem-Solving Practice worksheet presents additional reinforcement in solving word problems that apply both the concepts of the lesson and some review concepts.

Enrich The Enrich worksheet presents activities that extend the concepts of the lesson. Some Enrich materials are designed to widen students’ perspectives on the mathematics they are learning. These worksheets are written for use with all levels of students.

Resources for Problem-Solving Strategy and Problem-Solving Investigation Lessons In recognition of the importance of problem-solving strategies, worksheets for problem-solving lessons follow a slightly different format. For problem-solving lessons, a two-page Reteach worksheet offers a complete model for choosing a problem-solving strategy. For each Problem-Solving Strategy lesson, Reteach and Homework Practice worksheets offer reinforcement of the strategy taught in the Student Edition lesson. In contrast, the Problem-Solving
Investigation worksheets include a model strategy on the Reteach worksheets and provide problems requiring several alternate strategies on the Homework Practice and Skills Practice worksheets.

**Assessment Options** The assessment masters in the *Chapter 3 Resource Masters* offer a wide variety of assessment tools for monitoring progress as well as final assessment.

**Individual Progress Checklist** This checklist explains the chapter's goals or objectives. Teachers can record whether a student's mastery of each objective is beginning (B), developing (D), or mastered (M). The checklist includes space to record notes to parents as well as other pertinent observations.

**Chapter Diagnostic Assessment** This one-page test assesses students' grasp of skills that are needed for success in the chapter.

**Chapter Pretest** This one-page quick check of the chapter's concepts is useful for determining pacing. Performance on the pretest can help you determine which concepts can be covered quickly and which specific concepts may need additional time.

**Mid-Chapter Review** This one-page chapter test provides an option to assess the first half of the chapter. It includes both multiple-choice and free-response questions.

**Quizzes** Three free-response quizzes offer quick assessment opportunities at appropriate intervals in the chapter.

**Vocabulary Test** This one-page test focuses on chapter vocabulary. It is suitable for all students. It includes a list of vocabulary words and questions to assess students' knowledge of the words.

**Oral Assessment** This two-page test consists of one page for teacher directions and questions and a second page for recording responses. Although this assessment is designed to be used with all students, the interview format focuses on assessing chapter content assimilated by ELL students.

**Chapter Project Rubric** This one-page rubric is designed for use in assessing the chapter project. You may want to distribute copies of the rubric when you assign the project and use the rubric to record each student's chapter project score.

**Foldables Rubric** This one-page rubric is designed to assess the Foldables graphic organizer. The rubric is written to the students, telling them what you will be looking for as you evaluate their completed Foldables graphic organizer.

**Leveled Chapter Tests**

- **Form 1** assesses basic chapter concepts through multiple-choice questions and is designed for use with on-level students.
- **Form 2A** is designed for on-level students and is primarily for those who may have missed the Form 1 test. It may be used as a retest for students who received additional instruction following the Form 1 test.
- **Form 2B** is designed for students with a below-level command of the English language.
- **Form 2C** is a free-response test designed for on-level students.
- **Form 2D** is written for students with a below-level command of the English language.
- **Form 3** is a free-response test written for above-level students.
- **Extended-Response Test** is an extended response test for on-level students.

**Student Recording Sheet** This one-page recording sheet is for the standardized test in the Student Edition.

**Cumulative Standardized Test Practice** This three-page test, aimed at on-level students, offers multiple-choice questions and free-response questions.

**Answers**

The answers for the Anticipation Guide and Lesson Resources are provided as reduced pages with answers appearing in black. Full size line-up answer keys are provided for the Assessment Masters.
Use this graphic organizer to take notes on **Chapter 3: Subtraction**. Fill in the missing information.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>difference</td>
<td></td>
<td></td>
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<tr>
<td>estimate</td>
<td></td>
<td></td>
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<tr>
<td>front-end estimation</td>
<td></td>
<td></td>
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<tr>
<td>number sentence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>regroup</td>
<td></td>
<td></td>
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<tr>
<td>subtraction</td>
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</tr>
</tbody>
</table>
This is an alphabetical list of new vocabulary terms you will learn in **Chapter 3: Subtraction**. As you study the chapter, complete each term’s definition or description. Remember to add the page number where you found the term. Add this page to your math study notebook to review vocabulary at the end of the chapter.

<table>
<thead>
<tr>
<th>Vocabulary Term</th>
<th>Found on Page</th>
<th>Definition/Description/Example</th>
</tr>
</thead>
<tbody>
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<td>decimal point</td>
<td></td>
<td></td>
</tr>
<tr>
<td>difference</td>
<td></td>
<td></td>
</tr>
<tr>
<td>estimate</td>
<td></td>
<td></td>
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<tr>
<td>expression</td>
<td></td>
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<tr>
<td>front-end estimation</td>
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<tr>
<td>Term</td>
<td>Definition</td>
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<td>----------------------</td>
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<td></td>
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<tr>
<td>is equal to (=)</td>
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<td></td>
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<tr>
<td>is greater than (&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>is less than (&lt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>number sentence</td>
<td></td>
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<tr>
<td>regroup</td>
<td></td>
<td></td>
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<tr>
<td>subtraction</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Dear Family,

Today my class started Chapter 3: Subtraction. I will be learning how to subtract large numbers and how to estimate differences. Here are my vocabulary words and an activity that we can do together.

Love, ________________

Key Vocabulary

difference  The answer in a subtraction problem.

front-end estimation  An estimation method that uses the front digit of a number and replaces the other digits with zeros.

regroup  To take apart a number to write it in a new way.

number sentence  A way to express a math idea using numbers and operational symbols.

Activity

Fill a container with small objects (pennies, buttons). Write down the amount of items in the container. Then, fill another container with other small objects (popcorn kernels, beads). Do not fill this container as full as the first. Write down the amount of items in second container. Keep the amounts hidden and ask a family member to guess the amount of objects in each container. Write down their guesses. Round each guess to the closest ten and subtract the amounts. Compare this number to the actual difference in objects.

Books to Read

Subtraction Action  
by Loreen Leedy

Hannah's Collections  
by Marthe Jocelyn

Alice in Pastaland  
by Alexandra Wright
Estimada familia:

Hoy mi clase comenzó el Capítulo 3: La sustracción. Aprendere cómo usar la sustracción todos los días y también aprenderé a restar números grandes y a estimar diferencias. A continuación, están mis palabras de vocabulario y una actividad que podemos hacer juntos.

Cariños, ____________

**Vocabulario clave**

diferencia Respuesta a un problema de sustracción.

estimación por partes Método de estimación en que primero se suman o se restan los dígitos de la izquierda y luego se suman o se restan los dígitos en el próximo valor de posición.

reagrupar Separar un número para escribirlo de una nueva forma.

enunciado numérico Una manera de expresar una idea matemática usando números y símbolos de operaciones.

**Actividad**

Llenen un envase con objetos pequeños (monedas de 1¢, botones). Escriban la cantidad de objetos en el envase. Luego, llenen otro envase con otros objetos pequeños (maíz para palomitas, caramelos, cuentas). No llenen este último envase tanto como el primero. Anoten el número de objetos en el segundo envase. Mantengan las cantidades escondidas y pidanle a un miembro de la familia que adivine la cantidad de objetos en cada envase. ¿Aproximadamente cuántos objetos menos hay en el segundo envase? Anoten lo que adivine el miembro de la familia. Redondeen cada estimación a la decena más cercana y resten las cantidades. Comparen este número con la diferencia real de objetos.

**Libros recomendados:**

*Subtraction Action* 
de Loreen Leedy

*Hannah’s Collections* 
de Marthe Jocelyn

*Alice in Pastaland* 
de Alexandra Wright
### Anticipation Guide

**Subtraction**

#### Before you begin Chapter 3

- Read each statement.
- Decide whether you agree (A) or disagree (D) with the statement.
- Write A or D in the first column OR if you are not sure whether you agree or disagree, write NS (not sure).

<table>
<thead>
<tr>
<th>STEP 1 A, D, or NS</th>
<th>Statement</th>
<th>STEP 2 A or D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Difference is the answer to an addition problem.</td>
<td></td>
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<tr>
<td>2.</td>
<td>Using estimation, the difference between 97¢ and 66¢ is about 30¢.</td>
<td></td>
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<tr>
<td>3.</td>
<td>Cents can be written using the cents sign (¢) or the dollar sign ($).</td>
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<td>4.</td>
<td>When the number to be rounded is 5, always round up.</td>
<td></td>
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<tr>
<td>5.</td>
<td>There is only one method of estimation.</td>
<td></td>
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<tr>
<td>6.</td>
<td>Using models can help you to understand how to regroup tens and hundreds.</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>You do not need to line up the digits in the ones place when you are subtracting large numbers.</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>An expression contains numbers and operations, but no equal sign.</td>
<td></td>
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<tr>
<td>9.</td>
<td>7 &lt; 10.</td>
<td></td>
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#### After you complete Chapter 3

- Reread each statement and complete the last column by entering an A (agree) or a D (disagree).
- Did any of your opinions about the statements change from the first column?
- For those statements that you mark with a D, use a separate sheet of paper to explain why you disagree. Use examples, if possible.
Chapter 3 Game

ROUNDED DIFFERENCES

You will need:
• Paper clip and pencil
• Paper and pencil

Place the pencil with the paper clip in the center of the spinner shown below. Spin the paper clip to generate digits for 4-digit numbers.

1. Take turns spinning the pencil 4 times for each player and writing the digits left to right in the order the numbers occur.

2. Compare the numbers and find the difference. The player with the greater number rounds the difference to the nearest hundred and gets that number as a score.

3. Play the game 2 more times. The player with the higher score wins.
When you want to compare numbers, you subtract.

**Example** Find \(16 - 3\).

**Step 1** Model 16.

\[
\begin{array}{c|c}
16 & \text{Subtract the ones.} \\
\hline
-3 & 6 \text{ ones} - 3 \text{ ones} = 3 \text{ ones}
\end{array}
\]

**Step 2** 16 Subtract the tens.

\[
\begin{array}{c|c}
16 & \text{Subtract the tens.} \\
\hline
-3 & 1 \text{ tens} - 0 \text{ tens} = 1 \text{ ten}.
\end{array}
\]

So, \(16 - 3 = 13\).

When there are not enough ones to subtract from, you need to regroup.

**Example** Find \(14 - 8\).

**Step 1** Model 14.

\[
\begin{array}{c|c}
14 & \text{Subtract the ones.} \\
\hline
-8 & 8 \text{ ones} > 4 \text{ ones}, \text{ so regroup.}
\end{array}
\]

**Step 2** Regroup 1 tens into 10 ones.

\[
\begin{array}{c|c}
14 & 10 \text{ ones} + 4 \text{ ones} = 14 \text{ ones} \\
\hline
-8 & \text{Subtract} 14 \text{ ones} - 8 \text{ ones} = 6 \text{ ones}
\end{array}
\]

So, \(14 - 8 = 6\).

**Subtract. Check your answer.**

1. \(37 \quad \quad 49 \quad \quad 82 \quad \quad 31\)
2. \(-3 \quad \quad -7 \quad \quad -9 \quad \quad -6\)
3. \(77 \quad \quad 63 \quad \quad 54 \quad \quad 22\)
4. \(-8 \quad \quad -9 \quad \quad -3 \quad \quad -1\)
Skills Practice
Two-Digit Subtraction

Subtract. Check your answer.

1. 68 − 9 = _____
2. 33 − 23 = _____
3. 75 − 6 = _____
4. 49 − 9 = _____
5. 22 − 3 = _____
6. 66 − 15 = _____
7. 85 − 3 = _____
8. 11 − 7 = _____
9. 37 − 28 = _____
10. 90 − 22 = _____
11. 55 − 6 = _____
12. 30 − 24 = _____
13. 17 − 13 = _____
14. 82 − 23 = _____
15. 47 − 8 = _____
16. 90 − 3 = _____

17. Tess has 42 jars of paint. She gave 13 jars to Penny. How many were left for herself?

18. Retta is 43 inches tall. Her brother is 52 inches tall. What is the difference in their heights?

19. Kiyo had $21 when she went to the shopping center. On her trip, she purchased a new alarm clock. If she returned home with $8, how much was the alarm clock?
Subtract. Check your answer.

1. \[
\begin{align*}
25 &- 3 = 22 \\
37 &- 5 = 32 \\
49 &- 8 = 41 \\
52 &- 6 = 46
\end{align*}
\]

5. \[
\begin{align*}
67 &- 8 = 59 \\
83 &- 9 = 74
\end{align*}
\]

9. \[
\begin{align*}
64 &- 32 = 32 \\
56 &- 38 = 18 \\
75 &- 26 = 49
\end{align*}
\]

13. \[
15 - 4 = 11
\]

14. \[
28 - 6 = 22
\]

15. \[
38 - 2 = 36
\]

16. \[
35 - 8 = 27
\]

17. \[
62 - 7 = 55
\]

18. \[
84 - 6 = 78
\]

19. \[
48 - 22 = 26
\]

20. \[
56 - 34 = 22
\]

21. \[
67 - 58 = 9
\]

22. \[
71 - 19 = 52
\]

23. \[
83 - 45 = 38
\]

24. \[
95 - 56 = 39
\]

25. John’s mother made 24 muffins. John and his friends ate 6 muffins after school. How many muffins were left? 18

26. Rebecca has 17 pairs of socks. 9 pairs are white. How many pairs are not white? 8

Spiral Review

Find each sum. (Lesson 2–8)

27. \[
445 + 338 = 783
\]

28. \[
5.99 + 2.76 = 8.75
\]

29. \[
1,762 + 2,354 = 4,116
\]

30. \[
34.90 + 14.90 = 59.80
\]

31. \[
4,444 + 6,888 = 11,332
\]

32. \[
65.22 + 96.11 = 161.33
\]

33. \[
1,232 + 4,330 = 5,562
\]

34. \[
3.03 + 3.99 = 6.02
\]
Problem-Solving Practice

Two-Digit Subtraction

1. Kelly has 27 cousins. Twelve of the cousins are boys. How many cousins are girls?

2. Jeremy has collected 61 baseball caps from college and professional teams. Fifteen of the caps are from college teams. How many caps are from professional teams?

3. Maria’s swimming class will meet 50 times this year. She has already been to swimming class 34 times. How many more swimming classes does Maria have left this year?

4. It takes Dylan 47 minutes to get to his friend’s house. He left his home 18 minutes ago. How many more minutes will it take to get to his friend’s house?

5. Vanessa found 87 coins on the sidewalk. She gave 15 to her sister and 16 to her friend. How many coins does Vanessa have left?

6. Brandon had 75 math problems for homework. He did 12 at school. He did 10 when he got home. How many problems does Brandon still need to finish?
Enrich

Ring Toss

Solve each word problem. Ring numbers only once.

1. Byron threw two rings. The difference between the numbers is 12. The lesser number is 15. What is the greater number?

2. Jennifer threw two rings. The difference between the numbers is 6. The lesser number is greater than 21. What two numbers did Jennifer ring?

3. Adam threw two rings. The difference between the numbers is 3. The greater number is even and less than 21. The lesser number is more than 9. What two numbers did Adam ring?

4. Randi threw two rings. The difference between the numbers is 15. One of the numbers is not a 12, 9, or 6. What two numbers did Randi ring?
Estimate Differences

To estimate a difference, round each number and then subtract.

Round to the nearest ten.

\[ 51 - 27 \]
\[ 50 - 30 = 20 \]

Round to the nearest hundred.

\[ 913 - 496 \]
\[ 900 - 500 = 400 \]

Estimate each difference. Show how you rounded.

1. \[ 91 - 38 \]
   \[ \downarrow \quad \downarrow \]
   \[ \boxed{50} - \boxed{30} = \boxed{20} \]

2. \[ 86 - 39 \]
   \[ \downarrow \quad \downarrow \]
   \[ \boxed{90} - \boxed{40} = \boxed{50} \]

3. \[ 809 - 485 \]
   \[ \downarrow \quad \downarrow \]
   \[ \boxed{800} - \boxed{500} = \boxed{300} \]

4. \[ 886 - 150 \]
   \[ \downarrow \quad \downarrow \]
   \[ \boxed{900} - \boxed{200} = \boxed{700} \]

5. \[ 801 - 118 \]
   \[ \downarrow \quad \downarrow \]
   \[ \boxed{800} - \boxed{100} = \boxed{700} \]

6. \[ 911 - 138 \]
   \[ \downarrow \quad \downarrow \]
   \[ \boxed{900} - \boxed{100} = \boxed{800} \]

Estimate. Round to the nearest ten.

7. \[ 63 - 28 \]
   \[ \boxed{60} - \boxed{30} = \boxed{30} \]

8. \[ 82 - 69 \]
   \[ \boxed{80} - \boxed{70} = \boxed{10} \]

9. \[ 85 - 29 \]
   \[ \boxed{80} - \boxed{30} = \boxed{50} \]

10. \[ 63 - 19 \]
    \[ \boxed{60} - \boxed{20} = \boxed{40} \]

Estimate. Round to the nearest hundred.

11. \[ 709 - 371 \]
    \[ \boxed{700} - \boxed{400} = \boxed{300} \]

12. \[ 545 - 172 \]
    \[ \boxed{500} - \boxed{200} = \boxed{300} \]

13. \[ 924 - 115 \]
    \[ \boxed{900} - \boxed{100} = \boxed{800} \]

14. \[ 770 - 585 \]
    \[ \boxed{800} - \boxed{600} = \boxed{200} \]
Estimate each difference using rounding.

1. 73  -  27
2. 91  -  65
3. 685  -  193
4. 947  -  831
5. 45  -  19
6. 54  -  38
7. 615  -  315
8. 725  -  199
9. 881  -  350
10. 862  -  498
11. 519  -  383
12. 550  -  295
13. 703  -  376
14. 902  -  829
15. 909  -  788
16. 833  -  499
17. 890  -  690
18. 931  -  786
19. 58  -  27
20. 92  -  18
21. 468  -  179
22. 705  -  280
23. 932  -  239
24. 850  -  176
25. 48  -  27
26. 650  -  403

Solve.

27. The tree in Sue's backyard is 72 feet tall. The tree in Joe's backyard is 87 feet tall. About how much taller is the tree in Joe's backyard?

28. Amy's favorite tree is 67 feet tall. Another tree is 35 feet shorter than Amy's favorite tree. About how tall is the other tree?
Homework Practice

Estimate Differences

Estimate. Round to the nearest ten.

1. 57  2. 77  3. 52
   - 22   - 63   - 27

Estimate. Round to the nearest hundred.

4. 568  5. 487  6. 915
   - 322   - 219   - 192

7. 223  8. 835  9. 942
   - 145   - 462   - 358


11. Shannon’s scout troop sold 357 boxes of cookies last week. They started with 600 boxes to sell. About how many boxes do they have left to sell? __________

Spiral Review

Subtract. (Lesson 3–1)

12. 32  13. 34  14. 43  15. 48
    - 1   - 12   - 8   - 35

16. 58  17. 50  18. 62  19. 64
    - 9   - 27   - 8   - 39

20. David scored 25 points in his basketball game. Seven of his points were from free throws. The rest were goals from the field. How many points were from the field? ________________
Problem-Solving Practice

Estimate Differences

Use estimation to solve.

1. A basketball coach won 132 games. He won 79 more games than he lost. About how many games did he lose?

   about ____ games

2. The bleachers in the gym can seat about 289 people. If there are 191 people in the gym, about how many more people can fit in the bleachers?

   about ____ more

3. A red building in Houston, Texas, is 703 feet tall. It is 499 feet taller than a blue building. About how tall is the blue building?

   about ____ feet tall

4. Arco Company has $850 to spend on office equipment. The company bought a copy machine for $485. About how much money is left in the budget?

   about $ ____

5. Mr. Frasier has $875 in his savings account and $689 in his checking account. About how much more money is in his savings account than in his checking account?

   about $ ____ more

6. The Bank One Center in Dallas is 787 feet tall. It is 304 feet taller than the Harwood Center. Is the Harwood Center greater than or less than 500 feet tall?

   ____ than 500 feet tall

   Explain your answer.
Enrich

All About Bill and Jill

Bill and Jill estimate in two different ways. Bill rounds up or down to the nearest ten, hundred, or thousand. Jill uses front-end estimation. She looks at the digit that has the highest place value in a number.

For example, Bill rounds 75 to 80 when rounding to the nearest ten. Jill rounds 75 to 70 by using the digit at the front end of the number. She rounds to the tens place, which has a 7.

Round and estimate the following numbers the way Bill and Jill would. Then complete the subtraction problems.

<table>
<thead>
<tr>
<th></th>
<th>Round to the nearest ten.</th>
<th>Round to the nearest hundred.</th>
<th>Round to the nearest ten.</th>
<th>Round to the nearest thousand.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>94 - 56</td>
<td>374 - 294</td>
<td>736 - 92</td>
<td>4,598 - 2,874</td>
</tr>
<tr>
<td>↓</td>
<td>↓</td>
<td>↓</td>
<td>↓</td>
<td>↓</td>
</tr>
<tr>
<td>Bill</td>
<td></td>
<td>Bill</td>
<td>Bill</td>
<td>Bill</td>
</tr>
<tr>
<td>Jill</td>
<td></td>
<td>Jill</td>
<td>Jill</td>
<td>Jill</td>
</tr>
</tbody>
</table>

5. Round to the nearest ten, and then to the nearest hundred. In which way would Bill and Jill come up with the same answer?

7,506 - 932
↓  ↓
Bill ____________________________
Jill ____________________________

---

3–2

Chapter Resources
Subtracting money is similar to subtracting whole numbers. Sometimes, you need to regroup.

James wants to buy a toy car that costs $0.63. He only has $0.37. How much more money does he need to buy the car?

**Cost:** $0.63

\[
\begin{array}{c}
513 \\
\hline
- 0.37 \\
\hline
0.26
\end{array}
\]

Regroup 63 as 5 tens and 13 ones.

So, James needs $0.26 more to buy the car.

**Subtract.**

1. $0.87 - 0.38
2. $0.92 - 0.64
3. $0.35 - 0.16
4. $0.52 - 0.28
5. $0.69 - 0.55
6. $0.48 - 0.29
Skills Practice

Subtract Money

Subtract.

1. $0.38 \ - \ $0.29 = ______

2. 85¢ \ - \ 37¢ = ______

3. $0.58 \ - \ $0.42 = ______

4. 55¢ \ - \ 46¢ = ______

5. $0.74 \ - \ $0.36 = ______

6. $72 \ - \ $35 = ______

7. $0.88 \ - \ $0.44 = ______

8. $42 \ - \ $29 = ______

Solve.

9. Ross buys a game for $84. He gives the cashier $90. How much change does he get?

10. Tawana buys a toy for $66. She gives the cashier $80. How much change did the cashier give her?

11. Annie bought some shirts and paid with two $20-bills. The cashier gave Annie $16 in change. How much did the shirt cost?

12. Howard bought two sandwiches for $4 each. He gave the cashier two $5-bills. How much change did he get?
Subtract.

1. 38¢ − 3¢
2. $0.84 − $0.53
3. $95 − $42
4. 17¢ − 9¢

5. $0.60 − $0.45
6. $0.89 − $0.54
7. $0.67 − $0.50
8. $0.74 − $0.49

9. 83¢ − 21¢
10. 72¢ − 35¢
11. $0.45 − $0.25

12. $68 − $20
13. $0.32 − $0.16
14. $50 − $28

15. $0.43 − $0.12
16. $0.96 − $0.75
17. $82 − $67

18. Joe has saved $25. He buys a CD for $16. How much money will he have left?

19. Courtney has $27 to buy dinner. Her dinner is $18. How much money does Courtney have left?

Spiral Review

Estimate. Round to the nearest ten. (Lesson 3–2)

20. 28 − 17
21. 94 − 81
22. 77 − 21

Estimate. Round to the nearest hundred.

23. 503 − 264
24. 346 − 178
25. 848 − 162

26. 465 − 242
27. 525 − 377
28. 619 − 337
Problem-Solving Practice

Subtract Money

Solve.

1. Mr. Smith sold a $0.58 fruit bar to Molly. She gave him $0.75. How much change should Molly get?

2. Suppose you buy something and get $57 in change. What bills could the change be?

3. Amelia bought a $16 shirt and paid with two $10-bills. How much change does she get back? List the bills of the change.

4. Marisa paid for a board game with a $50-bill. She received $18 in change. How much did the board game cost?

5. Leandro pays for his textbook with two $10-bills. He gets back three $1-bills in change.
   How much did his textbook cost?

6. Josh sold a CD to Vera for $5. Vera gave Josh a $50-bill for the CD. Josh has no $5-bills but gives Vera the correct amount of change. Tell what bills he may have given her.

7. Meredith earned $75 helping Mrs. Yen weed her garden. Meredith earned $84 helping Mr. Hunt in his garden. How much more did Meredith earn helping Mr. Hunt?

8. Chuck has $75. If he spends $38 on comic books and snacks, how much of his money does he have left?
Jennifer had $10 to buy school supplies. To keep track of what she spent, she subtracted the cost of each item as she put it in her basket. She kept subtracting prices from her total so that each time she subtracted, she got a new total. First, she put 3 spiral notebooks and 6 pencils in her basket. Then she put in an eraser and a packet of notebook paper. She then bought three more items. After shopping, she did not have any money left. What three items did she purchase?
Reasonable Answers

After you solve a problem, it is important to check if your answer makes sense. One way to check if your answer is reasonable is to use estimates.

Use this exercise to learn more about checking whether an answer is reasonable.

Jorge has 243 baseball cards, and 198 cards are infielders. Jorge thinks he has about 50 outfielder cards. Is this reasonable?

| Understand | You know there are 243 cards.  
|            | You know that 198 cards are infielder cards.  
|            | You need to find out if 50 outfielder cards is a reasonable answer. |
| Plan       | Choose a strategy. You are finding part of a group.  
|            | You will estimate and subtract to find about how many cards are left.  
|            | You will also subtract to find the exact answer. |
| Solve      | First, estimate by rounding to the nearest 10.  
|            | 243 – 198 turns into 240 – 200 = 40  
|            | Then subtract. 243 – 198 = 45 |
| Check      | Look back at the problem. Jorge’s guess was that he had 50 outfielder cards. That is close to the estimate of 40. Jorge’s guess is reasonable.  
|            | Also check your answer by working the problem backwards:  
|            | 45 + 198 = 243  
|            | Since 243 is the number you started your subtraction with, your answer is correct. |
Solve. Check for reasonableness.

1. Angel's family is having dinner. The pizza delivery will cost $12. Angel has one $20-bill to pay for the pizza. Is it reasonable for Angel to expect about $10 in change from the delivery person? ______
   Use estimates to explain.

2. Holly wants to buy her 3 favorite movies. They cost $19, $16, and $18. She estimates that she will need $60 to buy the 3 movies. Is this a reasonable estimate? ______
   Explain.

3. Vanessa kicked the soccer ball at the goal 117 times yesterday. She kicked the ball 112 times today. Is it reasonable for Vanessa to say that she kicked the ball about 300 times? ______
   Explain.

4. Greg read 10 books last week and 12 books this week. Is it a reasonable estimate to say that he read 20 books? ______
   Explain.

5. Adrian estimates that he will need to bring 90 cookies for the third-grade picnic. There are 32 students in room 1, 31 students in room 2, and 31 students in room 3. Is 90 cookies a reasonable estimate? ______
   Explain.

6. Jacqueline wants to buy a book and a CD. The book is $4. The CD is $13. She estimates $15 will be enough money. Is this a reasonable estimate? ______
   Explain.
Solve. Check for reasonableness.

1. On Monday 321 people came for a craft show. On Tuesday 619 people came. Is it reasonable to say about 300 more people came to the craft show on Tuesday? _____
   Explain. ____________________________________________

2. Seth’s class took a poll to find out what weekend activities people enjoy. The table below shows their answers.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>playground</td>
<td>8</td>
</tr>
<tr>
<td>movie</td>
<td>4</td>
</tr>
<tr>
<td>friend over</td>
<td>12</td>
</tr>
<tr>
<td>be with family</td>
<td>8</td>
</tr>
</tbody>
</table>

Seth estimated that about half his class likes to spend time with their families. Is this reasonable? _____
   Explain. ____________________________________________

3. Using Seth’s class poll, is it reasonable to say that most of the class likes to have friends over or spend time with family? _____
   Explain. ____________________________________________

4. Dominique called her grandmother 17 times in July. She estimates that she called about half the days in July. Is this reasonable? _____
   Explain. ____________________________________________
Solve. Check for reasonableness.

1. This weekend Emily drew 4 pictures for her friend. Then she drew 3 pictures for her grandmother and 2 pictures for her brother. She said she drew about 10 pictures. Is this reasonable? 
   Explain.

2. Elizabeth has 13 yarn bracelets. She wants to have 20. She estimates she will need to make about 10 bracelets. Is this reasonable? 
   Explain.

3. Megan and Daniel have a bag of 150 raisins. Megan eats 11 raisins, and Daniel eats 12. They think there are 130 raisins left in the bag. Is 130 a reasonable estimate? 
   Explain.

Spiral Review

Subtract. (Lesson 3–3)

4. $0.71 \quad 5. \quad $0.57 \quad 6. \quad $0.54 \quad 7. \quad $0.81$
   $- \quad $0.54 \quad - \quad $0.24 \quad - \quad $0.38 \quad - \quad $0.32$

8. 64 – 33 
9. 77 – 51 
10. $0.52 – $0.37 
11. $81 – $35 
12. $71 – $36 
13. $71 – $65
Enrich

Find the Missing Digits

Use what you know about addition and subtraction fact families to find the missing digits. You may need to regroup.

1. \[\begin{array}{c}
4 \phantom{\Box 6} \\
\hline \\
2 \phantom{\Box 8} \\
\hline \\
\phantom{4} \Box 4 \phantom{3}\end{array}\]

2. \[\begin{array}{c}
\phantom{0} \Box 0 \phantom{7} \\
\hline \\
3 \phantom{\Box 5} \\
\hline \\
2 \ Box 9 \end{array}\]

3. Explain how you could solve these kinds of problems when there are digits missing.
   \[7 + \boxed{5} = 12\]
   \[7 - \boxed{5} = 2\]

Write a number inside each shape to make each number sentence true.

4. \[\begin{array}{c}
\phantom{\bigcirc} \bigcirc \\
\hline \\
\bigcirc \phantom{\bigcirc} \\
\hline \\
\phantom{\bigcirc} 5\end{array}\]

5. \[\begin{array}{c}
\phantom{\bigtriangleup} \bigtriangleup \\
\hline \\
\bigtriangleup \phantom{\bigtriangleup} \\
\hline \\
\phantom{\bigtriangleup} 9\end{array}\]

6. \[\begin{array}{c}
\phantom{\square} \square \\
\hline \\
\square \phantom{\square} \\
\hline \\
\phantom{\square} \bigtriangleup \phantom{\bigtriangleup}
\end{array}\]

7. \[\begin{array}{c}
\phantom{\bigcirc} \bigcirc \\
\hline \\
\bigcirc \phantom{\bigcirc} \\
\hline \\
\phantom{\bigcirc} \phantom{419} \\
\hline \\
\phantom{\bigcirc} \phantom{215}\end{array}\]

8. Why must the order of the shapes be the same when solving both the addition and subtraction problems?
Reteach
Three-Digit Subtraction with Regrouping

You can use models to help you regroup when you subtract.

Remember:
• Regroup 1 ten as 10 ones.
• Rename 63 as 5 tens 13 ones.

Use models to subtract.

1. 245 − 19 =

2. 193 − 44 =

3. 435 − 219 =

4. 564 − 228 =

5. 740 − 426 =

6. 335 − 127 =

Subtract. Check your answer.

7. 962 − 722 =

8. 681 − 361 =

9. 750 − 136 =

10. 435 − 219 =

11. 865 − 839 =

12. 942 − 927 =
Skills Practice
Three-Digit Subtraction with Regrouping

Subtract. Check your answer.

1. \( 597 - 318 = \) _____

2. \( 270 - 121 = \) _____

3. \( 464 - 128 = \) _____

4. \( 743 - 206 = \) _____

5. \( 632 - 427 = \) _____

6. \( 560 - 335 = \) _____

7. \( 823 - 426 = \) _____

8. \( 936 - 319 = \) _____

9. \( 448 - 329 = \) _____

10. \( 840 - 321 = \) _____

ALGEBRA Find each missing digit.

11. \[
\begin{array}{c}
51 \square \\
- 31 \square \\
\hline
19 \square
\end{array}
\]

12. \[
\begin{array}{c}
\square 3 2 \\
- 2 \square 9 \\
\hline
1 \square 3
\end{array}
\]

13. \[
\begin{array}{c}
\square 1 1 \\
- 22 \square \\
\hline
3 \square 2
\end{array}
\]

14. \[
\begin{array}{c}
74 \square \\
- 1 \square 5 \\
\hline
58 \square
\end{array}
\]

15. \[
\begin{array}{c}
3 \square 6 \\
- 1 \square 8 \\
\hline
\square 6 8
\end{array}
\]

16. \[
\begin{array}{c}
\square 4 2 \\
- 3 \square 1 \\
\hline
1 \square 2
\end{array}
\]
Subtract. Check your answer.

1. \[381 - 165 = 216\]
2. \[441 - 57 = 384\]
3. \[\$8.50 - \$2.43 = \$6.07\]
4. \[\$3.19 - \$1.75 = \$1.44\]
5. \[224 - 115 = 109\]
6. \[356 - 178 = 178\]
7. \[802 - 334 = 468\]
8. \[\$4.67 - \$1.82 = \$2.85\]
9. \[\$5.21 - \$3.75 = \$1.46\]
10. \[\$6.33 - \$2.45 = \$3.88\]

ALGEBRA Find each missing digit.

11. \[5 \square 1 \]
12. \[3 \square 8 5 \]
13. \[4 \square 9 \]
\[\begin{align*}
&265 \quad \square 23 \quad \square 49 \\
&\_ \_ \_ \_ \_ 6 \quad \_ \_ \_ \_ \_ \_ \_ 97
\end{align*}\]

14. The bike trail by James’s house is 215 yards long. The hiking trail by Hannah’s house is 118 yards long. How much longer is the bike trail by James’s house? ________________

Spiral Review (Lesson 3–4)

15. Pedro made 125 glasses of lemonade to sell at his stand. At the end of the day, there were 19 glasses left. He estimates that he sold about 100 glasses that day. Is this reasonable? ________________

Explain. __________________________________________________________________________

16. Brianna picked up 99 cans cleaning up the park last week with her scout troop. This week they picked up 312. She estimates that the troop picked up about 200 more cans this week. Is this reasonable? __________

Explain. __________________________________________________________________________
Problem-Solving Practice
Three-Digit Subtraction with Regrouping

Solve.

1. There were 175 peaches at the fruit stand.
   Customers bought 82 of the peaches. How many peaches are left?
   _______ peaches
   Did you need to regroup ones?
   _______ tens? _______

2. Another crate has 272 red and green apples.
   There are 123 red apples in the crate. How many apples are green?
   _______ green apples
   Did you need to regroup ones?
   _______ tens? _______

3. Tanisha bought a pack of 225 sheets of paper for her homework.
   After a week, she has 198 sheets of paper left. How many sheets of paper did Tanisha use?
   _______ sheets

4. The school library would like to raise $915 to buy more books.
   So far, the library has raised $475. How much more money does the library need to reach its goal?
   _______ more

5. The health food store had 254 granola bars. They sold 85 bars yesterday and another 78 bars today. How many granola bars does the store have left?
   _______ granola bars

6. Evan has 85 baseball cards and 129 basketball cards. Alan has 312 football cards. Who has more cards in all?
   _______________________
   How many more cards?
   _______ more cards
Enrich
Feeding the Bears

Brownie is a brown bear and Ben is a black bear. They are rescued bears that live at a wild animal park. Both eat a special mix of vegetables and dry dog food every day. The park starts each week with 800 pounds of food for each animal. Then it keeps track of how much Brownie and Ben eat. Use the chart to help you answer the questions. (Hint: Be sure to use regrouping when you subtract.)

<table>
<thead>
<tr>
<th>Bears</th>
<th>Food for the Week</th>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brownie</td>
<td>800 pounds</td>
<td>92</td>
<td>95</td>
<td>87</td>
<td>88</td>
<td>90</td>
<td>86</td>
<td>93</td>
</tr>
<tr>
<td>Ben</td>
<td>800 pounds</td>
<td>80</td>
<td>82</td>
<td>83</td>
<td>85</td>
<td>84</td>
<td>79</td>
<td>79</td>
</tr>
</tbody>
</table>

1. How much more food did Brownie eat than Ben ate from Sunday to Tuesday?

2. How much food did each bear have left after Saturday’s feeding?

   Brownie had ____________________________

   Ben had ____________________________

3. The park wants to buy just enough food, so that there isn’t any left over. How much food will it buy for each bear?

   For Brownie _______________ pounds

   For Ben _______________ pounds

4. What is the difference in the amount the two bears ate by the end of this week?

   ________________________________
Sometimes you can solve a problem using more than one strategy. You must choose the strategy that works best for you when solving the problem.

Use this exercise to learn more about choosing a strategy to solve a problem.

Tristan has $4.35. If he buys a ball for $2.13, how much money does he have left?

<table>
<thead>
<tr>
<th>Understand</th>
<th>What do you know?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• You know Tristan has $4.35.</td>
</tr>
<tr>
<td></td>
<td>• You know Tristan spent $2.13.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What do you need to find?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• You need to find out how much money Tristan has left.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plan</th>
<th>A four-step plan is a good way to solve many problems.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>When you read the problem to find out what information you know, circle key facts or words and underline what you need to find out.</td>
</tr>
<tr>
<td></td>
<td>Since you need to find how much money is left, subtract.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Solve</th>
<th>First take the money Tristan started with: $4.35</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Subtract what he spent: $2.13</td>
</tr>
<tr>
<td></td>
<td>To find what is left: $4.35 − $2.13 = $2.22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Check</th>
<th>Prove your answer:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Look at the problem again. Work backwards to check:</td>
</tr>
<tr>
<td></td>
<td>$2.22 + $2.13 = $4.35</td>
</tr>
</tbody>
</table>
Practice

Use any strategy shown below to solve. Tell what strategy you used.

• Estimate or an exact answer
• Reasonable answer
• Four-Step Plan

1. The animal shelter rescued 57 animals after the storm. Now there are 862 animals at the shelter. How many animals were there before the storm? _________________.
   What strategy did you use? ________________________________

2. Mrs. Connolly hid 115 prizes around the school. She gave her students clues to solve. Her students found 82 prizes. About how many prizes are still missing? _________________.
   What strategy did you use? ________________________________

3. Two cans of paint come in a box. Trevor saw a sign that says each can of paint costs $27. About how much will the box of paints cost? _________________.
   What strategy did you use? ________________________________

4. Natalie started the day with 178 bags of trail mix. Now she has 50 bags of trail mix left. Is it reasonable to say she gave away about 130 bags of trail mix? _________________.
   What strategy did you use? ________________________________

5. Connor’s grandfather gave him 87 baseball cards. Now he has 576 cards. How many cards did he have before his grandfather gave him more cards? _________________.
   What strategy did you use? ________________________________

6. Sabrina has $8.35. She spent $6.74 at the store. How much money does she have left? _________________.
   What strategy did you use? ________________________________
Use any strategy shown below to solve. Tell what strategy you used.

• Estimate or an exact answer   • Reasonable answer   • Four-Step Plan

1. Mariah earned 43 ribbons from swim meets this month. Now she has 756 ribbons in all. How many ribbons did she have before this month?______________________

What strategy did you use? ________________________________

2. Brad walks up 53 steps to get home. There are 211 steps to the top of his building. How many more steps would Brad have to walk up to get to the top floor?____________

What strategy did you use? ________________________________


What strategy did you use? ________________________________

4. Blake has saved 612 papers since his first day of school. His sister has saved 48 papers so far. About how many more papers has Blake saved? ______________

What strategy did you use? ________________________________

5. Mrs. Martinez bought groceries for $47. Then she bought pet food for $26. She thinks she spent about $100. Is this reasonable? ______________

What strategy did you use? ________________________________
Use any strategy shown below to solve. Tell what strategy you used.

• Estimate or an exact answer  • Reasonable answer  • Four-Step Plan

1. Mark is buying apples. They are $1.49 per pound. He wants to buy 2 pounds. How much will he spend on apples?

2. Gabriel has 15 baseballs. He used to have 53 baseballs but lost some when he moved. How many baseballs did he lose?

3. Abbie has 287 beans on her plate. Her mother says she must eat until there are only 35 beans left. How many beans must Abbie eat?

Spiral Review

ALGEBRA Find each missing digit. (Lesson 3–5)

4.  
   4 2 □
   \[ \begin{array}{c}
   \underline{1 5 6} \\
   \hline
   \underline{6 5}
   \end{array} \]

5.  
   2 2 □
   \[ \begin{array}{c}
   \underline{6 6} \\
   \hline
   5 \Box
   \end{array} \]

6.  
   5 □ 6
   \[ \begin{array}{c}
   \underline{3 2 1} \\
   \hline
   \underline{2 5}
   \end{array} \]
There are four boys in the Branch family. The chart below shows how much money each boy earned each week for three weeks.

<table>
<thead>
<tr>
<th></th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brad</td>
<td>$2.25</td>
<td>$6.40</td>
<td>$3.50</td>
<td></td>
</tr>
<tr>
<td>Bart</td>
<td>$4.00</td>
<td>$3.85</td>
<td>$1.20</td>
<td></td>
</tr>
<tr>
<td>Burt</td>
<td>$5.50</td>
<td>$2.75</td>
<td>$3.80</td>
<td></td>
</tr>
<tr>
<td>Brent</td>
<td>$4.50</td>
<td>$5.25</td>
<td>$3.75</td>
<td></td>
</tr>
</tbody>
</table>

Circle the statement that is reasonable.

1. Burt and Brad are comparing how much money they made over three weeks.
   Burt said, “I made about $10.00 more than Brad.”
   Brad said, “We both made about the same amount of money.”

   Explain your thinking: __________________________________________

2. Bart and Brent are thinking about how much money Brad made for weeks 2 and 3.
   Bart said, “Brad made about $3.00 less in Week 3 than in Week 2.”
   Brent said, “Brad made about $2.00 less in Week 3 than in Week 2.”

   Explain your thinking: __________________________________________

3. Brad and Brent plan to make the same amount of money in Week 4 that Brad made in Week 2. They are thinking about who will have made the most money after four weeks.
   Brad says, “I will have made more money.”
   Brent says, “I will have made more money.”

   Explain your thinking: __________________________________________
Find \(6,426 - 3,278\).

**Subtract the ones.**
Regroup if necessary.
2 tens 6 ones = 1 ten 16 ones

**Subtract the tens.**
Regroup if necessary.
4 hundreds 1 ten = 3 hundreds 11 tens

**Subtract the hundreds and thousands.**

<table>
<thead>
<tr>
<th>Thousands</th>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>1</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>− 3</td>
<td>2</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>4</td>
<td>8</td>
</tr>
</tbody>
</table>

Subtract. Check each answer.

1. \(4,685 - 1,279\)  
   \(3,406\)
2. \(9,354 - 1,953\)  
   \(7,401\)
3. \(6,527 - 432\)  
   \(6,095\)
4. \(8,711 - 7,338\)  
   \(1,373\)
5. \(6,345 - 5,732\)  
   \(613\)

6. \(8,832 - 448\)  
   \(8,384\)
7. \(4,213 - 2,999\)  
   \(1,214\)
8. \(9,595 - 1,396\)  
   \(8,199\)
9. \(6,762 - 3,883\)  
   \(2,879\)
10. \(9,136 - 457\)  
    \(8,679\)

11. \(8,447 - 4,191\)  
    \(4,256\)
12. \(6,229 - 5,337\)  
    \(892\)
13. \(8,674 - 482\)  
    \(8,192\)
14. \(1,373 - 998\)  
    \(375\)
15. \(7,147 - 2,639\)  
    \(4,508\)
16. \(9,521 - 3,587\)  
    \(5,934\)
17. \(5,212 - 1,999\)  
    \(3,213\)
18. \(6,222 - 2,730\)  
    \(3,492\)
19. \(8,315 - 798\)  
    \(7,517\)
20. \(7,445 - 655\)  
    \(6,790\)
21. \(4,123 - 1,432\)  
    \(2,691\)
22. \(\$3,228 - \$625\)  
    \(\$2,603\)
### Subtract Greater Numbers

Subtract. Check your answer.

<p>| | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6,387</td>
<td>2</td>
<td>6,217</td>
<td>3</td>
<td>9,817</td>
<td>4</td>
<td>1,754</td>
</tr>
<tr>
<td></td>
<td>− 192</td>
<td></td>
<td>− 3,860</td>
<td></td>
<td>− 2,087</td>
<td></td>
<td>− 382</td>
</tr>
<tr>
<td>5</td>
<td>3,498</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>− 2,567</td>
</tr>
<tr>
<td>6</td>
<td>4,891</td>
<td>7</td>
<td>3,165</td>
<td>8</td>
<td>9,315</td>
<td>9</td>
<td>4,646</td>
</tr>
<tr>
<td></td>
<td>− 975</td>
<td></td>
<td>− 1,620</td>
<td></td>
<td>− 4,928</td>
<td></td>
<td>− 2,995</td>
</tr>
<tr>
<td>10</td>
<td>6,635</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>− 669</td>
</tr>
<tr>
<td>11</td>
<td>5,662</td>
<td>12</td>
<td>8,257</td>
<td>13</td>
<td>3,426</td>
<td>14</td>
<td>5,163</td>
</tr>
<tr>
<td></td>
<td>− 325</td>
<td></td>
<td>− 766</td>
<td></td>
<td>− 2,839</td>
<td></td>
<td>− 3,886</td>
</tr>
<tr>
<td>15</td>
<td>7,546</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>− 787</td>
</tr>
</tbody>
</table>

| 16| 4,998 − 3,912 = _______ |
| 17| 8,277 − 5,092 = _______ |
| 18| 5,123 − 987 = _______ |
| 19| 7,654 − 6,666 = _______ |
| 20| 4,325 − 998 = _______ |
| 21| 6,172 − 85 = _______ |
| 22| 6,286 − 5,375 = _______ |
| 23| 5,352 − 2,448 = _______ |

**ALGEBRA** Write + or − to make a true number sentence.

| 24| 8,734 □ 4,292 = 4,442 |
| 25| 687 □ 474 = 1,161 |
| 26| 8,132 □ 983 = 9,115 |
| 27| 8,225 □ 6,334 = 1,891 |

**Solve.**

28. On a parade float, there are 3,732 red roses and 1,850 white roses. How many more red roses are there?

29. Of the 4,258 roses on another float, 680 were wilted. How many were not wilted?

---

**Chapter Resources**

Chapter 3

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Subtract.

1. \(1,816 - 429\)  
2. \(3,659 - 2,485\)  
3. \(4,718 - 1,962\)  
4. \(7,613 - 5,549\)  

5. \(1,237 - 863\)  
6. \(2,689 - 1,156\)  
7. \(2,879 - 1,675\)  
8. \(3,466 - 2,132\)  
9. \(4,768 - 3,021\)  
10. \(7,547 - 5,223\)  

11. A trail is 5,386 feet long. Chloe has already walked 1,753 feet. How much farther does she need to walk to complete the trail?

12. Seth has 2,374 Legos to build with. He used 1,142 to build a car. How many Legos does he have left?

Spiral Review

Use any strategy shown below to solve. Tell what strategy you used. (Lesson 3–6)

13. 15 friends were playing at the park. 2 left to go to soccer practice. 4 left to go home. Three more left to go to the library. How many friends are left at the park?

14. Seth’s bus brings 37 kids to school. The next bus brings 42. If 118 kids come to school by bus, how many are on the third bus?
Solve.

1. A library has 2,222 books about sports and 1,814 books about animals. How many more sports books are there than animal books?
   ____________ more books

2. There were 3,631 books at the book sale. There are now 1,435 books left. How many books were sold?
   ____________ books

3. In the 2007 NFL season, a receiver rushed 1,139 yards, and a running back rushed for 1,435 yards. How many more yards were rushed by the running back than the receiver?
   ____________ more yards

4. Pittsburgh University won the college football championship in 1937. They won again in 1976. How many years were there between championships?
   ____________ years

5. Carl has 1,253 marbles in a jar. He took 346 marbles out of the jar. How many marbles are left in the jar?
   $ ____________ marbles

6. A stadium has 8,535 seats. At the game, there were still 1,956 seats left. How many seats were sold?
   ____________ seats
Sand and Sea Park is checking the weight of its animals. The chart shows which animals they have. It also shows which ones they have weighed and how many pounds each weighs. The walrus and sea lion have not been weighed. Answer the questions and complete the chart.

<table>
<thead>
<tr>
<th>Animal</th>
<th>dolphin</th>
<th>harbor seal</th>
<th>killer whale</th>
<th>polar bear</th>
<th>walrus</th>
<th>sea lion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>573</td>
<td>375</td>
<td>8,356</td>
<td>1,342</td>
<td>______</td>
<td>______</td>
</tr>
</tbody>
</table>

1. The walrus weighs 5,619 pounds less than the killer whale. How much does it weigh? 
   __________ pounds

2. The sea lion weighs 610 pounds less than the polar bear. How much does it weigh? 
   __________ pounds

3. What is the difference in weight between the animal that weighs the least and the animal that weighs the most? 
   __________ pounds

4. What is the difference in weight between the sea lion and the walrus? 
   __________ pounds

5. How much more does the sea lion weigh than the dolphin? 
   __________ pounds
Reteach

Subtract Across Zeros

You can use place-value charts to help you regroup across zeros.

Find 305 – 176.

**Step 1**
Subtract the ones.
No tens to regroup.
Regroup the hundreds.

<table>
<thead>
<tr>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

**Step 2**
Regroup the tens.

<table>
<thead>
<tr>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Step 3**
Subtract the ones, tens, and hundreds.

<table>
<thead>
<tr>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>- 1</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
</tbody>
</table>

Subtract. Check your answer.

1. 106
   - 28
   = 78

2. $503
   - $167
   = $336

3. 405
   - 218
   = 187

4. $601
   - $378
   = $223

5. 200
   - 145
   = 55

6. 205
   - 92
   = 113

7. 308
   - 175
   = 133

8. 300
   - 56
   = 244

9. $505
   - $90
   = $415

10. 802
    - 132
    = 670

11. 500 – 418 = 82

12. $206 – $138 = $68

13. 801 – 482 = 319

14. 100 – 33 = 67

15. 607 – 527 = 80

16. $700 – $19 = $681

17. $902 – $863 = $39

18. 400 – 189 = 211
Subtract. Check your answer.

1. 503 - 82 = __________
   2. $607 - $238 = __________
   3. 730 - 467 = __________
   4. 901 - 719 = __________
   5. $309 - $223 = __________

6. 208 - 75 = __________
   7. 305 - 161 = __________
   8. 400 - 286 = __________
   9. 504 - 316 = __________
   10. $700 - $199 = __________

11. 103 - 45 = __________
    12. $901 - $333 = __________

13. 800 - 65 = __________
    14. 702 - 618 = __________

15. 205 - 74 = __________
    16. 700 - 412 = __________

17. 607 - 31 = __________
    18. 800 - 433 = __________

Solve.

19. A bag holds 300 seeds. Brandon plants 79 of the seeds. How many seeds are left?

   __________ seeds

20. A book about gardening has 504 pages. Amy has read 245 pages so far. How many more pages does she have left to read?

   __________ pages

21. The cafeteria has 300 chairs. There are only 271 people sitting in the chairs. How many chairs are empty?

   __________ chairs

22. There were 902 movie tickets at the ticket booth. Now, there are only 129 tickets left. How many tickets have been sold?

   __________ tickets
Subtract. Check your answer.

1. \[100 - 27\]
2. \[301 - 172\]
3. \[500 - 165\]
4. \[702 - 234\]

5. \[\$400 - \$138\]
6. \[\$600 - \$422\]

7. \[\$702 - \$375\]
8. \[301 - 28\]

9. \[200 - 143\]
10. \[803 - 336\]

11. 100 of the third-graders wear backpacks to school.
    67 of the second-graders wear backpacks to school.
    How many more third-graders wear backpacks?

12. Kayla’s mom has $500. She buys a computer for $328.
    How much money does she have now?

Spiral Review
Subtract. (Lesson 3–7)

13. \[1,426 - 389\]
14. \[2,255 - 1,343\]
15. \[\$3,678 - \$1,836\]
16. \[\$5,491 - \$1,762\]

17. Morgan has a high score of 9,875 on her favorite game. Her brother can score 6,548. What is the difference between their scores?
**Problem-Solving Practice**

**Subtract Across Zeros**

**Solve.**

1. The best bowler in the Junior Bowler’s League scored 150 points. Jason scored 125 points. How many points higher did the best bowler score than Jason?

   ____________ points higher

2. There are 70 bowlers in the league this year. There were only 54 bowlers last year. How many more bowlers joined the league this year?

   ____________ more bowlers

<table>
<thead>
<tr>
<th>Votes for School President</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candidate</td>
</tr>
<tr>
<td>Ariana</td>
</tr>
<tr>
<td>Miguel</td>
</tr>
<tr>
<td>Tyrone</td>
</tr>
</tbody>
</table>

**Use the chart to solve.**

3. How many more votes did the winner get than Miguel?

   ____________ more votes

4. How many more votes did Tyrone need to win the election?

   ____________ more votes

**Solve.**

5. Harrison and Jordan played 3 computer games. Jordan scored 124 points in the first game and 268 points in the second game. Harrison scored a total of 600 points for all 3 games. How many points does Jordan need in the third game to beat Harrison’s score?

   ____________ points

6. Keisha is saving money for a new computer that costs $480. She has saved $175. She found a coupon for $50 off the price of the computer. How much more money does Keisha need to save to buy the computer?

   $ ____________ more
Enrich
Subtraction Pinwheels

Find the missing numbers in each subtraction pinwheel. Remember to regroup when subtracting across zeros.

5. Match the difference with a number shown under the lines below. Write the letter of the difference from the box on the line to write a mystery message.

1,483   277   1,732   1,483   86   1,800   999
An expression uses numbers and symbols to make a math statement. Here are some examples of expressions:

\[ 6 + 8 \quad 5 - 2 + 10 \quad 12 - 5 \]

A number sentence uses an equals sign to show that two expressions are equal. Here are some examples of true number sentences:

\[ 7 + 8 = 15 \quad 5 + 2 + 1 = 8 \quad 15 - 5 = 10 \]

Write an expression and a number sentence for each problem. Then solve.

1. A Douglas fir tree is 100 meters tall. A Ponderosa pine tree is 68 meters tall. How much taller is the Douglas fir than the Ponderosa pine?
   What is the expression?
   
   \[ \text{The Douglas fir is } \_\_\_\_\_\_\_\text{ meters taller than the Ponderosa pine.} \]

2. Tony’s Garden Supplies sells $525 worth of plants. The store also sells $234 worth of supplies. How much money does the store make in all?

   \[ \text{The store makes } \_\_\_\_\_\_\_\text{ dollars in all.} \]

3. A tree farm has 248 balsam fir trees and 96 Douglas fir trees. How many more balsam firs are there than Douglas firs?

   \[ \text{There are } \_\_\_\_\_\_\_\text{ more balsam firs than Douglas firs.} \]
Skills Practice

Algebra: Expressions and Number Sentences

Write an expression and a number sentence for each problem. Then solve.

1. A black spruce tree is 32 feet tall. An Engelmann pine tree is 110 feet tall. How much taller is the Engelmann pine than the black spruce?

2. A live oak tree is 48 feet tall. A California white oak tree is 42 feet taller. How tall is the California white oak?

3. The garden club raises $123 for a community garden. The club spends $78 on supplies. How much money does the garden club have left?

4. Nadia’s garden has a length of 45 feet and a width of 32 feet. How much longer is the length than the width?

Tell whether + or – makes each number sentence true.

5. $8 \, \bigcirc \, 1 = 4 + 3$

6. $521 + 10 = 20 \, \bigcirc \, 511$

7. $5 - 1 = 3 \, \bigcirc \, 1$

8. $701 \, \bigcirc \, 23 = 663 + 15$

9. $12 \, \bigcirc \, 5 = 10 + 7$

10. $16 + 14 = 50 \, \bigcirc \, 20$

11. $15 \, \bigcirc \, 9 = 3 + 3$

12. $75 \, \bigcirc \, 9 = 60 + 6$

13. $111 \, \bigcirc \, 11 = 50 + 50$

14. $94 \, \bigcirc \, 17 = 180 - 69$
Write an expression to describe each problem. Then solve.

1. Luis needs 4 blue marbles, 8 striped marbles, 12 green marbles, and 18 red marbles for his game. How many marbles does he need?

2. Shelby made 15 bracelets. Her mother made 43. How many more bracelets did Shelby’s mother make?

Use the data to write a number sentence for each of the following.

3. sum of votes for soccer and football

4. sum of votes for basketball and volleyball

5. difference of votes for soccer and lacrosse

Spiral Review

Subtract. Check for reasonableness. (Lesson 3-8)

6. 200 \[ \quad \quad \quad - 43 \]
7. 302 \[ \quad \quad \quad - 166 \]
8. 400 \[ \quad \quad \quad - 248 \]
9. 601 \[ \quad \quad \quad - 526 \]
1. Robert is 47 inches tall. His older brother Randy is 65 inches tall. How much taller is Randy than Robert?

\[ \text{__________ inches taller} \]

2. Robert weighs 52 pounds. Randy weighs 68 pounds more than Robert. How much does Randy weigh?

\[ \text{__________ pounds} \]

3. Heather and Aaron each bought a game. Heather paid $15 for her game. Aaron paid $7 more than Heather. How much did Aaron’s game cost?

\[ \text{$__________ more} \]

4. There are 500 sheets of art paper in a pack. The pack has 125 white sheets, 135 black sheets, and 115 yellow sheets. The rest of the sheets are red. How many red sheets of art paper are in the pack?

\[ \text{__________ red sheets} \]

5. Write your own problem that has an answer of $37.

[Blank lines for writing]
Enrich

Choose a Sign

Fill in the missing signs. Write + or − in the box. Write =, <, or > in the circle to make the following number sentences true.

1. 9 □ 5 + 3 □ 9 − 4 □

2. 4,925 □ 1,679 □ ,245 □

3. 3 □ s + 2 □ s □ 1 □

4. 100 □ the number days in a week □ 94 □

5. 18 □ 27 □ 36 □ 72 □ 9 □

6. 456 □ 25 □ 25 □ 456 □

7. 8,005 □ 5008 □ 2,997 □

8. 87 rounded □ 58 rounded is □ 140.

Write a number sentence to show how you rounded to make the number sentence true.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
## Individual Progress Checklist

<table>
<thead>
<tr>
<th>B</th>
<th>D</th>
<th>M</th>
<th>Goal</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>subtract from multiples of 10, 100, and 1,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>subtract 2-, 3-, and 4-digit numbers</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>estimate differences</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>write expressions and number sentences</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>solve problems by checking for reasonable answers</td>
<td></td>
</tr>
</tbody>
</table>

## Notes

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Subtract.

1. $16 - 7 = \underline{\quad}$
2. $12 - 4 = \underline{\quad}$
3. $18 - 9 = \underline{\quad}$
4. $60 - 10 = \underline{\quad}$

Round each number to the nearest ten.

5. 86
6. 65
7. 31
8. 79

Round each number to the nearest hundred.

9. 374
10. 256
11. 501
12. 634

Estimate. Round to the nearest ten.

13. $72 - 62 = \underline{\quad}$
14. $59 - 28 = \underline{\quad}$
15. $87 - 25 = \underline{\quad}$
16. $66 - 41 = \underline{\quad}$

17. Janie had $35 to spend at the craft store. She purchased a box of paint. Janie received $13 in change. How much did the paint cost?

$\underline{\quad}$
Chapter Pretest

Subtract.

1. \(32 - 4 = \)
2. \(68 - 48 = \)
3. \(91 - 2 = \)
4. \($0.57 - $0.19 = \)
5. \($673 - $456 = \)
6. Adult admission to the amusement park is \($49\). A child’s admission is \($25\). How much more does an adult admission cost?

Estimate. Round to the nearest ten.

7. \(65 - 47 = \)
8. \(92 - 36 = \)
9. \(71 - 13 = \)

Solve.

10. \(743 - 147 = \)
11. \(902 - 577 = \)
12. \($4,668 - $921 = \)
13. \(8,487 - 3,431 = \)
Quiz 1 (Lesson 3–1 through 3–3)

Subtract.

1. 65 – 42 =
2. 70 – 54 =
3. $87 – $25 =
4. $555 – $346 =

Estimate. Round to the nearest ten.

5. 94 – 82 =
6. 89 – 37 =
7. 52 – 34 =

Estimate. Round to the nearest hundred.

8. 658 – 131 =
9. 422 – 167 =
10. 228 – 102 =

Solve.

11. Bradley has read 157 books so far this year. He wants to read a total of 325 books. Rounding to the nearest hundred, about how many more books does he need to read?

12. Veronica’s friends are going to the zoo. The total cost is $75. Only $26 has been collected so far. How much money still needs to be collected?
Subtract.

1. $132 - 45 =

2. $212 - 166 =

3. $515 - 278 =

4. $121 - 34 =

5. $436 - 148 =

6. $725 - 162 =

Solve. Check for reasonableness.

7. Paige had 157 students at her old school. There are 550 at her new school. She estimates that her new school has about 400 more students. Is that reasonable? Explain.

8. At the scavenger hunt, each team had to find 82 items. Jordan’s team found 31 items. About how many more items do they need to find?

9. Erin had 542 tickets to get a prize. She gave her friend 125. How many tickets does she have left?
Quiz 3  (Lesson 3–7 through 3–9)

Subtract.

1. 2,735 – 872 =
2. $4,268 – $2,631 =
3. 9,256 – 8,447 =
4. $6,001 – $3,405 =
5. 326 – 129 =

Write an expression to describe the situation. Then solve.

6. Dakota’s baseball team scored 8 runs. Ben’s baseball team scored 9 runs. How many runs did they score altogether?

Use + or – to make each number sentence true.

7. 231 – 76 = 274 _____ 119
8. 486 _____ 125 = 154 + 207

Compare. Use <, >, or =.

9. 775 – 623 _____ 234 + 119
10. 509 + 491 _____ 1,325 – 325
Mid-Chapter Review

Read each question carefully. Write your answer on the line provided.

1. Kevin has 32 pens. 6 are missing. How many are left?
   A. 26  B. 16  C. 28  D. 22  1. _____

2. $53 - $38 =
   A. $35  B. $26  C. $25  D. $15  2. _____

3. Estimate. Round to the nearest hundred.
   842 - 684
   A. 90  B. 98  C. 100  D. 200  3. _____

Subtract.

4. 72 - 57 =

5. 75¢ - 32¢ =

6. $0.41 - $0.25 =

Estimate. Round to the nearest ten.

7. 89 - 42 =

8. 73 - 58 =

9. 37 - 19 =

Solve. Check for reasonableness.

10. Amber noticed her bag had a hole in it. She had 57 pennies in it when she left school. She has 38 pennies now. She estimates that she lost about 20 pennies. Is this reasonable? Explain. 10. _____
Vocabulary Test

Match each word to its definition. Write your answers on the lines provided.

1. difference _____
   A. a way to express a math idea using numbers and operational symbols and includes >, < or =.

2. regroup _____
   B. a number close to an exact value

3. number sentence _____
   C. the answer in a subtraction problem

4. subtraction _____
   D. to take apart a number to write it in a new way

5. estimate _____
   E. an operation that tells the difference, when some or all are taken away

Fill in the blank for each of the following questions.

6. When you are completing a subtraction problem, the answer is known as the _____.

7. 15 ones = 1 ten 5 ones. This is the correct way to _____.

8. 400 − 106 (estimate 400 − 100) is about 300. This is an example of _____.
Oral Assessment

Arrange a selection of pencils, crayons, and paper. Include six of each. Line up the objects in rows on a table.

Read each question aloud to the student. Then write the student’s answers on the lines below the question.

1. How many objects do we have?

________________________________________________________________________

2. If I take away these six objects and these three objects, how many objects will I have left?

________________________________________________________________________

3. How many will I have if I take away two more objects?

________________________________________________________________________

4. Tell how you got your answer.

________________________________________________________________________

________________________________________________________________________

5. Let’s line up six pencils and four crayons. How many more pencils than crayons do we have?

________________________________________________________________________

6. Tell how you got your answer.

________________________________________________________________________
7. If I have $4 and buy a can of juice for $1, how much money do I have left?

8. Tell how you got your answer.

9. If my bean plant is 12 inches tall and my sunflower plant is 7 inches tall, how much taller is my bean plant?

10. Tell how you got your answer.

11. If a sweater costs $17 and a shirt costs $8, about how much less does the shirt cost?

12. Do we need an exact answer or an estimate answer?

13. How can you tell?
## Chapter Project Rubric

<table>
<thead>
<tr>
<th>Score</th>
<th>Explanation</th>
</tr>
</thead>
</table>
| 3     | Student successfully completed the chapter project.  
       | Student demonstrated appropriate use of chapter information in completing the chapter project. |
| 2     | Student completed the chapter project with partial success.  
       | Student partially demonstrated appropriate use of chapter information in completing the chapter project. |
| 1     | Student did not complete the chapter project or completed it with little success.  
       | Student demonstrated very little appropriate use of chapter information in completing the chapter project. |
| 0     | Student did not complete the chapter project.  
       | Student demonstrated inappropriate use of chapter information in completing the chapter project. |
# Foldables Rubric

## Subtraction

**Layered Look Foldable**

<table>
<thead>
<tr>
<th>Score</th>
<th>Explanation</th>
</tr>
</thead>
</table>
| **3** | Student properly assembled Foldables graphic organizer according to instructions.  
Student recorded information related to the chapter in the manner directed by the Foldables graphic organizer.  
Student used the Foldables graphic organizer as a study guide and organizational tool. |
| **2** | Student exhibited partial understanding of proper Foldables graphic organizer assembly.  
Student recorded most but not all information related to the chapter in the manner directed by the Foldables graphic organizer.  
Student demonstrated partial use of the Foldables graphic organizer as a study guide and organizational tool. |
| **1** | Student showed little understanding of proper Foldables graphic organizer assembly.  
Student recorded only some information related to the chapter in the manner directed by the Foldables graphic organizer.  
Student demonstrated little use of the Foldables graphic organizer as a study guide and organizational tool. |
| **0** | Student did not assemble Foldables graphic organizer according to instructions.  
Student recorded little or no information related to the chapter in the manner directed by the Foldables graphic organizer.  
Student did not use the Foldables graphic organizer as a study guide and organizational tool. |
Read each question carefully. Write your answer in the line provided. Find each difference.

1. $96 - 83$
   A. 3      B. 13      C. 14      D. 20  1. _____

2. $9.03 - $1.56
   F. $8.53  G. $7.57  H. $7.47  J. $6.57  2. _____

3. 7,294 - 835
   A. 7,661  B. 7,659  C. 6,459  D. 6,359  3. _____

4. 8,001 - 546
   F. 8,545  G. 7,545  H. 7,455  J. 5,565  4. _____

5. $50.00 - $10.79
   A. $40.79  B. $39.21  C. $21.31  D. $20.31  5. _____

Estimate. Round to the nearest ten.

6. 53 - 28
   F. 40      G. 30      H. 20      J. 10  6. _____

7. 49 - 12
   A. 10      B. 20      C. 30      D. 40  7. _____

Estimate. Round to the nearest hundred.

8. 377 - 201
   F. 200      G. 300      H. 400      J. 500  8. _____
Chapter Test, Form 1  (continued)

Solve. Check for reasonableness.

9. Inez bought a cactus for $2.25 and an aloe plant for $4.50. She paid with two $5 bills. Is it reasonable to say she has enough money left to buy another cactus?

A. no; $2.25 + $4.50 + $2.25 > $5.00
B. no; $2.25 + $4.50 + $2.25 > $5.00 + $5.00
C. no; $2.25 + $4.50 + $4.50 > $5.00
D. yes; $2.25 + $4.50 + $2.25 < $5.00 + $5.00

Solve.

10. A nursery received a shipment of 3,648 tulip bulbs at the beginning of the season. By the end of the season, only 183 bulbs were left. How many tulip bulbs did the nursery sell?


11. In the first week of the flower show, 2,917 people attended. 2,304 people attended the second week. About how many more people attended the first week?

A. 6,000  B. 5,000  C. 4,000  D. 1,000

Write an expression to describe the problem. Then solve.

12. Workers unloaded 425 bags of soil and 176 bags of peat moss. How many more bags of soil than peat moss were unloaded?

F. 425 + 176 = 601  G. 425 − 176 = 249
H. 425 + 425 = 850  J. 249 − 176 = 73
Chapter Test, Form 2A

Read each question carefully. Write your answer on the line provided.

Find each difference.

1. $88 - 67$
   - A. 11
   - B. 21
   - C. 23
   - D. 27

2. $3,361 - 2,704$
   - F. 657
   - G. 667
   - H. 1,657
   - J. 1,667

3. $7.06 - 3.97$
   - A. $4.97$
   - B. $4.19$
   - C. $3.19$
   - D. $3.09$

4. $636 - 434$
   - F. 102
   - G. 192
   - H. 202
   - J. 232

5. $4,700 - 671$
   - A. 4,029
   - B. 4,129
   - C. 4,127
   - D. 4,139

Estimate. Round to the nearest ten.

6. $72 - 39$
   - F. 20
   - G. 30
   - H. 40
   - J. 50

7. $55 - 21$
   - A. 10
   - B. 20
   - C. 30
   - D. 40

Estimate. Round to the nearest hundred.

8. $601 - 356$
   - F. 400
   - G. 300
   - H. 200
   - J. 100
Solve. Check for reasonableness.

9. Javier bought a comic book for $6.25 and a notepad for $2.10. He paid with two $5-bills. Is it reasonable to say he has enough money left to buy another comic book?

A. no; $6.25 + $2.10 + $2.10 > $5.00
B. no; $6.25 + $2.10 + $6.25 > $5.00 + $5.00
C. no; $6.25 + $2.10 + $2.10 > $5.00 + $5.00
D. yes; $6.25 + $2.10 + $6.25 < $5.00 + $5.00 + $5.00

Solve.

10. Andrew and Jacob baked 65 lemon bars to sell at a bake sale. At the end of the bake sale, only 36 lemon bars were left. How many lemon bars did the boys sell?

F. 36  G. 31  H. 29  J. 19

11. On the first night of the school play, 1,638 people attended. 1,912 people attended on the second night. About how many more people attended on the second night?

A. 90  B. 100  C. 200  D. 300

Write an expression to describe the situation. Then solve.

12. Kaitlyn has read 57 pages of a 245-page book. How many more pages does Kaitlyn have left to read?

F. 245 + 57 = 302  G. 245 – 57 = 188
H. 245 + 245 = 490  J. 188 – 57 = 131
Chapter Test, Form 2B

Read each question carefully. Write your answer on the line provided.

Find each difference.

1. $200 – $43
   A. $257    B. $242    C. $157
1. _____

2. 636 – 434
   F. 102    G. 192    H. 202
2. _____

3. 4,700 – 671
   A. 4,029    B. 4,129    C. 4,127
3. _____

4. $20.00 – $3.61
   F. $16.29    G. $16.39    H. $17.49
4. _____

5. 6,472 – 563
   A. 4,909    B. 5,809    C. 5,909
5. _____

Estimate. Round to the nearest ten.

6. 74 – 13
   F. 50    G. 60    H. 70
6. _____

Estimate. Round to the nearest hundred.

7. 601 – 356
   A. 400    B. 300    C. 200
7. _____
Solve. Check to see if your answer makes sense.

8. Javier bought a book for $6.25 and a notepad for $2.10. He paid with two $5-bills. Does he have enough money left to buy another book?
   
   F. no; $6.25 + $2.10 + $2.10 > $5.00
   G. no; $6.25 + $2.10 + $6.25 > $5.00 + $5.00
   H. yes; $6.25 + $2.10 + $6.25 < $5.00 + $5.00 + $5.00

9. On the first night, 1,638 people saw the play. 1,912 people saw it on the second night. About how many more people attended on the second night?
   
   A. 90  B. 100  C. 300

10. Andrew and Jacob baked 65 cookies to sell at a bake sale. At the end of the bake sale, only 36 cookies were left. How many cookies did the boys sell?
   
   F. 36  G. 31  H. 29

Write an expression to describe the problem. Then solve.

11. Kaitlyn has read 57 pages of a 245-page book. How many more pages does Kaitlyn have left to read?
   
   A. 245 + 57 = 302
   B. 245 − 57 = 188
   C. 245 + 245 = 490
Chapter Test, Form 2C

Read each question carefully. Write your answer on the line provided.

Find each difference.
1. $7.06 - $3.97
2. 636 - 434
3. 88 - 67
4. 300 - 58
5. $200 - $43

Estimate. Round to the nearest ten.
6. 55 - 21
7. 72 - 39

Estimate. Round to the nearest hundred.
8. 601 - 356
9. 746 - 108

Find each difference.
10. $23.09 - 4.17
11. 4,700 - 671
12. $20.00 - $3.61
13. 3,361 – 2,704
14. 6,472 – 563

Solve. Check for reasonableness.

15. Andrew and Jacob baked 35 lemon bars to sell at a bake sale. At the end of the bake sale, only 16 lemon bars were left. How many lemon bars did the boys sell?

16. Javier bought a book for $5.25 and a notepad for $3.10. He paid with two $5-bills. Is it reasonable to say he has enough money left to buy another book?

17. On the first night of the play, 1,027 people attended. 1,192 people attended on the second night. About how many more people attended on the second night?

18. Josh has read 64 pages of a 245-page book. How many pages does he have left to read?

Use the prices for problems 19–20.

<table>
<thead>
<tr>
<th>School Store Price List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eraser: 20¢</td>
</tr>
<tr>
<td>Pencil: 10¢</td>
</tr>
<tr>
<td>Notepad: 75¢</td>
</tr>
</tbody>
</table>

19. Amber buys two erasers. She pays with two quarters. What expression shows her change?

20. How much more is the price of a notepad than the price of a pencil?
Chapter Test, Form 2D

Read each question carefully. Write your answer on the line provided.

Find each difference.

1. $7.06 – $3.97
2. 636 – 434
3. 88 – 67
4. 300 – 58
5. $200 – $43

Estimate. Round to the nearest ten.

6. 55 – 21
7. 72 – 39

Estimate. Round to the nearest hundred.

8. 601 – 356
9. 746 – 108

Find each difference.

10. $23.09 – $4.17
11. 4,700 – 671
12. $20.00 – $3.61
Solve. Check to see if your answer makes sense.

13. Andrew and Jacob baked 65 cookies to sell at a bake sale. At the end of the bake sale, only 36 cookies were left. How many cookies did the boys sell?

14. Javier bought a book for $5.95 and a notepad for $2.00. He paid with two $5-bills. Does he have enough money left to buy another book?

15. 1,368 people saw the play on the first night. 1,565 people saw it on the second night. About how many more people attended on the second night?

Write an expression to describe the problem. Then solve.

16. Kaitlyn has read 57 pages of a 245-page book. How many more pages does she have left to read?

Use the prices for problems 19–20.

<table>
<thead>
<tr>
<th>School Store Price List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eraser: 20¢</td>
</tr>
<tr>
<td>Pencil: 10¢</td>
</tr>
<tr>
<td>Notepad: 75¢</td>
</tr>
</tbody>
</table>

17. Amber buys one eraser and one pencil. She pays with 2 quarters. Write an expression that shows her change. Then solve.

18. How much more is the notepad than the pencil?
Read each question carefully. Write your answer on the line provided.

Find each difference.

1. $88 - 67$
2. $300 - 58$
3. $7.06 - 3.97$
4. $636 - 434$
5. $200 - 43$

Estimate. Round to the nearest hundred.

6. $601 - 356$

Estimate. Round to the nearest ten.

7. $55 - 21$
8. $72 - 39$
9. $74 - 13$

Find each difference.

10. $20.00 - 3.61$
11. $3,361 - 2,704$
12. $23.09 - 4.17$
13. $4,700 - 671$
14. $6,472 - 563$
Solve. Check for reasonableness.

15. On the first night of the school play, 1,638 people attended. On the second night, 1,912 people attended. How many more people attended on the second night compared to the first night?

16. Andrew and Jacob baked 65 lemon bars to sell at a bake sale. They sold the lemon bars for $2 each. At the end of the bake sale, only 36 lemon bars were left. How many lemon bars did the boys sell? How much money did they make?

17. Javier bought a comic book for $6.25 and a notepad for $2.10. He paid with two $5-bills. Is it reasonable to say he has enough money left to buy another comic book?

Write an expression to describe the problem. Then solve.

18. Kaitlyn has read 57 pages of a 245-page book. How many pages does Kaitlyn have left to read?

Use the prices for problems 19–20.

<table>
<thead>
<tr>
<th>School Store Price List</th>
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</thead>
<tbody>
<tr>
<td>Eraser: 20¢</td>
</tr>
<tr>
<td>Pencil: 10¢</td>
</tr>
<tr>
<td>Notepad: 75¢</td>
</tr>
</tbody>
</table>

19. Amber buys one pencil. She pays with a quarter. Write an expression that shows her change. Then solve.

20. How much more is the price of a notepad than the price of a pencil?
Demonstrate your knowledge by giving a clear, concise solution to each problem. Be sure to include all relevant drawings and justify your answers. You may show your solution in more than one way or investigate beyond the requirements of the problem. If necessary, record your answer on another piece of paper.

1. a. Explain in your own words the meaning of \textit{subtraction}.

   b. What is the difference between subtraction with regrouping and subtraction without regrouping?

   c. How do you subtract money? Provide an example.

2. a. Explain how to estimate the answer to a subtraction problem.

   b. How would you round to the nearest ten to solve a subtraction problem?

   c. Write a problem about a real-life situation using estimation. Then solve the problem.

3. Use the table to answer the questions below.

<table>
<thead>
<tr>
<th>Refreshments</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salad</td>
<td>$1.95</td>
</tr>
<tr>
<td>Turkey Sub</td>
<td>$2.95</td>
</tr>
<tr>
<td>Fruit Salad</td>
<td>$1.95</td>
</tr>
<tr>
<td>Apple</td>
<td>$0.87</td>
</tr>
<tr>
<td>Milk</td>
<td>$1.15</td>
</tr>
</tbody>
</table>

a. About how much more money does it cost to buy a turkey sub than a fruit salad?

b. About how much will it cost to buy an apple, a milk and a salad?
Use this recording sheet with pages 150–151 of the Student Edition.

Read each question. Then fill in the correct answer.

1. A  B  C  D

2. F  G  H  J

3. A  B  C  D

4. F  G  H  J

5. A  B  C  D

6. F  G  H  J

7. A  B  C  D

8. F  G  H  J

9. A  B  C  D

10. F  G  H  J
Cumulative Standardized Test Practice

Test Example

Margaret and her mother are running errands. They have $100 for grocery shopping, a haircut for Margaret, and lunch. They spend $67.34 on groceries and $20.00 on the haircut. How much money do they have left to spend on lunch?

A. $21  B. $10.60  C. $12.66  D. $5.88

Read the Question

You need to find out how much Margaret and her mother can spend on lunch after buying groceries and a haircut.

Solve the Question

First, add the cost of the groceries and haircut.

$67.34 + $20 = $87.34

Then subtract $87.34 from $100.

$100 - $87.34 = $12.66

So, Margaret and her mother have $12.66 left to spend on lunch. The answer is C.

Read each question carefully. Write your answer on the line provided.

1. Each year Rey saves $1,000 in his savings account. So far, he has saved $782. How much more does he need to save?
   A. $234  B. $218  C. $210  D. $599  1. _____

2. The library received 47 new books. If there are now 622 books, how many were there before the new books arrived?
   F. 575  G. 565  H. 900  J. 603  2. _____
3. Last year, the community park spent $2,000 on landscaping. This year, the park plans to spend $10,000 on equipment. How much more is the park spending this year?

A. $3,500  B. $5,000  C. $7,000  D. $8,000  3. _____

4. Which number is 17 less than 3,756?

F. 2,354  G. 3,710  H. 3,739  J. 3,000  4. _____

5. What is the best estimate of the difference rounded to the nearest hundred?

715 - 290

A. 400  B. 350  C. 500  D. 600  5. _____

6. Lucy has a box of 300 pencils. 42 of the pencils have been sharpened. Which number sentence describes Lucy’s pencils that have not been sharpened?

F. 300 + 300 = 600  G. 300 + 42 = 342
H. 300 - 42 = 258  J. 42 - 42 = 0  6. _____

7. Sebastian has 93 books on his bookshelf. Which of these equals 93?

A. 70 + 30 + 9  B. 30 + 60 + 3
C. 20 + 70 + 10  D. 50 + 40 + 9  7. _____

8. What number makes this number sentence true?

4 + 5 + 1 = 3 + 6 +

F. 8  G. 20  H. 1  J. 2  8. _____
9. What is the number in standard form?
   A. 1,033  
   B. 435  
   C. 945  
   D. 2054

10. Which point on the number line names 323?
    F. R  
    G. C  
    H. K  
    J. X

Write your answer on the line provided.

11. Every year the Animal Club collects $1,500 in dues. So far, the club has collected $1,208. How much more does the club need to collect?

12. On a bus trip, Tracy counts 87 green signs. Elena counts 45 brown signs. How many more signs did Tracy count?

13. What number is 25 less than 4,523?

14. Last year, Stevenson Summer Adventure Camp spent $1,050 on new classroom supplies. This year, the camp plans to spend $4,000 in playground equipment. How much more is the camp spending this year?

15. What is the best estimate of the difference rounded to the nearest hundred?
    678 – 321

16. What is 3,000 – 1,845?

17. What number makes this number sentence true?
    2 + 1 + 7 = 4 + 2 + \_

Cumulative Standardized Test Practice (continued)
### Anticipation Guide

**Subtraction**

#### Before you begin Chapter 3

- Read each statement.
- Decide whether you agree (A) or disagree (D) with the statement.
- Write A or D in the first column OR if you are not sure whether you agree or disagree, write NS (not sure).

#### Step 1

<table>
<thead>
<tr>
<th>Statement</th>
<th>A, D, or NS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Difference is the answer to an addition problem.</td>
<td>D</td>
</tr>
<tr>
<td>2. Using estimation, the difference between 97¢ and 66¢ is about 30¢.</td>
<td>A</td>
</tr>
<tr>
<td>3. Cents can be written using the cents sign (¢) or the dollar sign ($).</td>
<td>A</td>
</tr>
<tr>
<td>4. When the number to be rounded is 5, always round up.</td>
<td>A</td>
</tr>
<tr>
<td>5. There is only one method of estimation.</td>
<td>D</td>
</tr>
<tr>
<td>6. Using models can help you to understand how to regroup tens and hundreds.</td>
<td>A</td>
</tr>
<tr>
<td>7. You do not need to line up the digits in the ones place when you are subtracting large numbers.</td>
<td>D</td>
</tr>
<tr>
<td>8. An expression contains numbers and operations, but no equal sign.</td>
<td>A</td>
</tr>
<tr>
<td>9. 7 &lt; 10.</td>
<td>A</td>
</tr>
<tr>
<td>10. 108 &gt; 109.</td>
<td>D</td>
</tr>
</tbody>
</table>

#### Step 2

- Reread each statement and complete the last column by entering an A (agree) or a D (disagree).
- Did any of your opinions about the statements change from the first column?
- For those statements that you mark with a D, use a separate sheet of paper to explain why you disagree. Use examples, if possible.

### Graphic Organizer

**Chapter 3: Subtraction**

Use this graphic organizer to take notes on Chapter 3: Subtraction. Fill in the missing information.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>difference</td>
<td>the answer to a subtraction problem</td>
<td>5 (-) 1 = 4</td>
</tr>
<tr>
<td>estimate</td>
<td>a number close to an exact value; an estimate indicates about how much</td>
<td>48 (-) 22 (estimate 50 (-) 20) about 30</td>
</tr>
<tr>
<td>front-end estimation</td>
<td>uses the front digit of a number and replaces the other digits with zeros</td>
<td>300 (-) 106 (estimate 300 (-) 100) about 200</td>
</tr>
<tr>
<td>number sentence</td>
<td>a way to express a math idea using numbers and operational symbols</td>
<td>5 (+) 4 = 9; 8 (&gt;) 5</td>
</tr>
<tr>
<td>regroup</td>
<td>to take apart a number to write it in a new way</td>
<td>12 ones = 1 ten 2 ones</td>
</tr>
<tr>
<td>subtraction</td>
<td>an operation that tells the difference, when some or all are taken away</td>
<td>5 (-) 3 = 2</td>
</tr>
</tbody>
</table>

### Terms and Definitions

- **difference**: the answer to a subtraction problem
- **estimate**: a number close to an exact value; an estimate indicates about how much
- **front-end estimation**: uses the front digit of a number and replaces the other digits with zeros
- **number sentence**: a way to express a math idea using numbers and operational symbols
- **regroup**: to take apart a number to write it in a new way
- **subtraction**: an operation that tells the difference, when some or all are taken away
Subtract. Check your answer.

1. \(68 - 9 = \boxed{59}\)
2. \(33 - 23 = \boxed{10}\)
3. \(75 - 6 = \boxed{69}\)
4. \(49 - 9 = \boxed{40}\)
5. \(22 - 3 = \boxed{19}\)
6. \(66 - 15 = \boxed{51}\)
7. \(85 - 3 = \boxed{82}\)
8. \(11 - 7 = \boxed{4}\)
9. \(37 - 28 = \boxed{9}\)
10. \(90 - 22 = \boxed{68}\)
11. \(55 - 6 = \boxed{49}\)
12. \(30 - 24 = \boxed{6}\)
13. \(17 - 13 = \boxed{4}\)
14. \(82 - 23 = \boxed{59}\)
15. \(47 - 8 = \boxed{39}\)
16. \(90 - 3 = \boxed{87}\)

17. Tess has 42 jars of paint. She gave 13 jars to Penny. How many were left for herself? \(29 \text{ jars}\)

18. Retta is 43 inches tall. Her brother is 52 inches tall. What is the difference in their heights? \(9 \text{ inches}\)

19. Kiyo had $21 when she went to the shopping center. On her trip, she purchased a new alarm clock. If she returned home with $8, how much was the alarm clock? \$13
### Name ___________ Date ___________

#### 3-1 Homework Practice

**Two-Digit Subtraction**

<table>
<thead>
<tr>
<th>Subtract</th>
<th>Check your answer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 25 − 3</td>
<td>22</td>
</tr>
<tr>
<td>2. 37 − 5</td>
<td>32</td>
</tr>
<tr>
<td>3. 49 − 8</td>
<td>41</td>
</tr>
<tr>
<td>4. 52 − 6</td>
<td>46</td>
</tr>
<tr>
<td>5. 67 − 8</td>
<td>59</td>
</tr>
<tr>
<td>6. 83 − 9</td>
<td>74</td>
</tr>
<tr>
<td>7. 39 − 17</td>
<td>22</td>
</tr>
<tr>
<td>8. 45 − 21</td>
<td>24</td>
</tr>
<tr>
<td>9. 64 − 32</td>
<td>32</td>
</tr>
<tr>
<td>10. 56 − 38</td>
<td>18</td>
</tr>
<tr>
<td>11. 75 − 26</td>
<td>49</td>
</tr>
<tr>
<td>12. 91 − 33</td>
<td>58</td>
</tr>
<tr>
<td>13. 15 − 4</td>
<td>11</td>
</tr>
<tr>
<td>14. 28 − 6</td>
<td>22</td>
</tr>
<tr>
<td>15. 38 − 2</td>
<td>36</td>
</tr>
<tr>
<td>16. 35 − 8</td>
<td>27</td>
</tr>
<tr>
<td>17. 62 − 7</td>
<td>55</td>
</tr>
<tr>
<td>18. 84 − 6</td>
<td>78</td>
</tr>
<tr>
<td>19. 48 − 22</td>
<td>26</td>
</tr>
<tr>
<td>20. 56 − 34</td>
<td>22</td>
</tr>
<tr>
<td>21. 67 − 58</td>
<td>9</td>
</tr>
<tr>
<td>22. 71 − 19</td>
<td>52</td>
</tr>
<tr>
<td>23. 83 − 45</td>
<td>38</td>
</tr>
<tr>
<td>24. 95 − 56</td>
<td>39</td>
</tr>
</tbody>
</table>

**Spiral Review**

Find each sum. (Lesson 2–8)

| 27. 445 + 338 = 783 | 28. $5.99 + $2.76 = $8.75 |
| 29. 1,762 + 2,354 = 4,116 | 30. $34.90 + $14.90 = $49.80 |
| 31. 4,444 + 6,888 = 11,332 | 32. $65.22 + $96.11 = $161.33 |
| 33. 1,232 + 4,330 = 5,562 | 34. $3.03 + $3.99 = $7.02 |

---

### Name ___________ Date ___________

#### 3-1 Problem-Solving Practice

**Two-Digit Subtraction**

1. Kelly has 27 cousins. Twelve of the cousins are boys. How many cousins are girls?

   \[ \text{15 cousins} \]

2. Jeremy has collected 61 baseball caps from college and professional teams. Fifteen of the caps are from college teams. How many caps are from professional teams?

   \[ \text{46 caps} \]

3. Maria's swimming class will meet 50 times this year. She has already been to swimming class 34 times. How many more swimming classes does Maria have left this year?

   \[ \text{16 more classes} \]

4. It takes Dylan 47 minutes to get to his friend's house. He left his home 18 minutes ago. How many more minutes will it take to get to his friend's house?

   \[ \text{29 minutes} \]

5. Vanessa found 87 coins on the sidewalk. She gave 15 to her sister and 16 to her friend. How many coins does Vanessa have left?

   \[ \text{56 coins} \]

6. Brandon had 75 math problems for homework. He did 12 at school. He did 10 when he got home. How many problems does Brandon still need to finish?

   \[ \text{53 problems} \]
Solve each word problem. Ring numbers only once.

1. Byron threw two rings. The difference between the numbers is 12. The lesser number is 15. What is the greater number?

   27

2. Jennifer threw two rings. The difference between the numbers is 6. The lesser number is greater than 21. What two numbers did Jennifer ring?

   24 and 30

3. Adam threw two rings. The difference between the numbers is 3. The greater number is even and less than 21. The lesser number is more than 9. What two numbers did Adam ring?

   18 and 15

4. Randi threw two rings. The difference between the numbers is 15. One of the numbers is not a 12, 9, or 6. What two numbers did Randi ring?

   15 and 30

To estimate a difference, round each number and then subtract.

1. 91 – 38

   \[90 - 40 = 50\]

2. 86 – 39

   \[90 - 40 = 50\]

3. 809 – 485

   \[800 - 500 = 300\]

4. 886 – 150

   \[900 - 200 = 700\]

5. 801 – 118

   \[800 - 100 = 700\]

6. 911 – 138

   \[900 - 100 = 800\]

Estimate. Round to the nearest ten.

7. 63 – 28

   \[60 - 30 = 30\]

8. 82 – 69

   \[80 - 70 = 10\]

9. 85 – 29

   \[90 - 30 = 60\]

10. 63 – 19

    \[60 - 20 = 40\]

Estimate. Round to the nearest hundred.

11. 709 – 371

    \[700 - 400 = 300\]

12. 545 – 172

    \[500 - 200 = 300\]

13. 924 – 115

    \[900 - 100 = 800\]

14. 770 – 585

    \[800 - 600 = 200\]
Skills Practice

Estimate Differences

Sample estimates are given.
Accept reasonable estimates.

Estimate each difference using rounding.

1. 73 – 27  70 – 30 = 40
2. 91 – 65  90 – 70 = 20
3. 685 – 193  700 – 200 = 500
4. 947 – 831  900 – 800 = 100
5. 45 – 19  50 – 20 = 30
6. 54 – 38  50 – 40 = 10
7. 615 – 315  600 – 300 = 300
8. 725 – 199  700 – 200 = 500
9. 881 – 350  900 – 400 = 500
10. 862 – 498  900 – 500 = 400
11. 519 – 383  500 – 400 = 100
12. 550 – 295  600 – 300 = 300
13. 703 – 376  700 – 400 = 300
14. 902 – 829  900 – 800 = 100
15. 909 – 788  900 – 800 = 100
16. 835 – 499  800 – 500 = 300
17. 890 – 690  900 – 700 = 200
18. 931 – 786  900 – 800 = 100
19. 58 – 27  60 – 30 = 30
20. 92 – 18  90 – 20 = 70
21. 468 – 179  500 – 200 = 300
22. 705 – 280  700 – 300 = 400
23. 932 – 239  900 – 200 = 700
24. 850 – 176  900 – 200 = 700
25. 48 – 27  50 – 30 = 20
26. 650 – 403  700 – 400 = 300

Solve.

27. The tree in Sue’s backyard is 72 feet tall. The tree in Joe’s backyard is 87 feet tall. About how much taller is the tree in Joe’s backyard?

90 – 70 = 20; about 20 feet

28. Amy’s favorite tree is 67 feet tall. Another tree is 35 feet shorter than Amy’s favorite tree. About how tall is the other tree?

70 – 40 = 30; about 30 feet

Homework Practice

Estimate Differences

Estimate. Round to the nearest ten.

1. 57  2. 77  3. 52
   – 22 – 63 – 27
   = 30 = 60 = 24

Estimate. Round to the nearest hundred.

4. 568  5. 487  6. 915
   – 322 – 219 – 192
   = 100 = 500 = 200

10. Colin wants to buy a CD for $17 and a book for $10. About how much does the CD cost? $20 – $10 = $10

11. Shannon’s scout troop sold 357 boxes of cookies last week. They started with 600 boxes to sell. About how many boxes do they have left to sell? 600 – 400 = 200

Solve.

12. 32  13. 34  14. 43  15. 48
   – 1 – 12 – 8 – 35
   = 31 = 22 = 35 = 13

16. 58  17. 50  18. 62  19. 64
   – 9 – 27 – 8 – 39
   = 49 = 23 = 54 = 25

20. David scored 25 points in his basketball game. Seven of his points were from free throws. The rest were goals from the field. How many points were from the field? 18 points
Problem-Solving Practice

Use estimation to solve.
1. A basketball coach won 132 games. He won 79 more games than he lost. About how many games did he lose?
   About 50 games
2. The bleachers in the gym can seat about 289 people. If there are 191 people in the gym, about how many more people can fit in the bleachers?
   About 100 more
3. A red building in Houston, Texas, is 703 feet tall. It is 499 feet taller than a blue building. About how tall is the blue building?
   About 200 feet tall
4. Arco Company has $850 to spend on office equipment. The company bought a copy machine for $485. About how much money is left in the budget?
   About $400
5. Mr. Frasier has $875 in his savings account and $689 in his checking account. About how much more money is in his savings account than in his checking account?
   About $200 more

Sample answers are given. Accept all reasonable estimates.

Enrich

All About Bill and Jill

Bill and Jill estimate in two different ways. Bill rounds up or down to the nearest ten, hundred, or thousand. Jill uses front-end estimation. She looks at the digit that has the highest place value in a number.

For example, Bill rounds 75 to 80 when rounding to the nearest ten. Jill rounds 75 to 70 by using the digit at the front end of the number. She rounds to the tens place, which has a 7.

Round and estimate the following numbers the way Bill and Jill would. Then complete the subtraction problems.

1. Round to the nearest ten.
   94 - 56
   Bill 90 - 60 = 30
   Jill 90 - 50 = 40

2. Round to the nearest hundred.
   374 - 294
   Bill 400 - 300 = 100
   Jill 300 - 200 = 100

3. Round to the nearest ten.
   736 - 92
   Bill 740 - 90 = 650
   Jill 730 - 90 = 640

4. Round to the nearest thousand.
   4,598 - 2,874
   Bill 5,000 - 3,000 = 2,000
   Jill 4,000 - 2,000 = 2,000

5. Round to the nearest ten, and then to the nearest hundred. In which way would Bill and Jill come up with the same answer?
   7,506 - 932
   Bill 7,510 - 930 = 6,580; 7,500 - 900 = 6,600
   Jill 7,500 - 930 = 6,570; 7,500 - 900 = 6,600

They get the same answer when rounding to the nearest hundred.
Answers

Grade 3

Reteach

Subtract Money

Subtracting money is similar to subtracting whole number. Sometimes, you need to regroup.

James wants to buy a toy car that costs $0.63. He only has $0.37. How much more money does he need to buy the car?

Cost: $0.63
Amount James has: $0.37

$0.63
$0.37
$0.26

Regroup 63 as 5 tens and 13 ones.

So, James needs $0.26 more to buy the car.

Subtract.

1. $0.87 - $0.38 = $0.49
2. $0.92 - $0.64 = $0.28
3. $0.35 - $0.16 = $0.19
4. $0.52 - $0.28 = $0.24
5. $0.69 - $0.55 = $0.14
6. $0.48 - $0.29 = $0.19

Skills Practice

Subtract Money

Subtract.

1. $0.38 - $0.29 = $0.09
2. 85¢ - 37¢ = 48¢
3. $0.58 - $0.42 = $0.16
4. 55¢ - 46¢ = 9¢
5. $0.74 - $0.36 = $0.38
6. $72 - $35 = $37
7. $0.88 - $0.44 = $0.44
8. $42 - $29 = $13

Solve.

9. Ross buys a game for $84. He gives the cashier $90. How much change does he get?

$6

10. Tawana buys a toy for $66. She gives the cashier $80. How much change did the cashier give her?

$14

11. Annie bought some shirts and paid with two $20-bills. The cashier gave Annie $16 in change. How much did the shirt cost?

$24

12. Howard bought two sandwiches for $4 each. He gave the cashier two $5-bills. How much change did he get?

$2
Name ______________________ Date ____________ 

3–3 Homework Practice  
Subtract Money  

3NS2.1, 3NS3.3

Solve.  

1. Mr. Smith sold a $0.58 fruit bar to Molly. She gave him $0.75. How much change should Molly get? $0.17

2. Suppose you buy something and get $57 in change. What bills could the change be? Sample answer: two $20-bills, one $10-bill, one $5-bill and two $1-bills

3. Amelia bought a $16 shirt and paid with two $10-bills. How much change does she get back? List the bills of the change. $4; four 1-bills

4. Marisa paid for a board game with a $50-bill. She received $18 in change. How much did the board game cost? $32

5. Leandro pays for his textbook with two $10-bills. He gets back three $1-bills in change. How much did his textbook cost? $9

6. Josh sold a CD to Vera for $5. Vera gave Josh a $50-bill for the CD. Josh has no $5-bills but gives Vera the correct amount of change. Tell what bills he may have given her. Sample answer: two $20-bills and five $1-bills

7. Meredith earned $75 helping Mrs. Yen weed her garden. Meredith earned $84 helping Mr. Hunt in his garden. How much more did Meredith earn helping Mr. Hunt? $9

8. Chuck has $75. If he spends $38 on comic books and snacks, how much of his money does he have left? $37

Solve.  

Estimate. Round to the nearest ten. (Lesson 3–2)  

20. 28 – 17 ______ 21. 94 – 81 ______ 22. 77 – 21 ______

30 – 20 = 10 ______ 90 – 80 = 10 ______ 80 – 20 = 60

Estimate. Round to the nearest hundred.  


500 – 300 = 200 ______ 300 – 200 = 100 ______ 800 – 200 = 600


500 – 200 = 300 ______ 500 – 400 = 100 ______ 600 – 300 = 300

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Chapter Resources

3–3

Enrich

Shopping for School Supplies

Jennifer had $10 to buy school supplies. To keep track of what she spent, she subtracted the cost of each item as she put it in her basket. She kept subtracting prices from her total so that each time she subtracted, she got a new total. First, she put 3 spiral notebooks and 6 pencils in her basket. Then she put in an eraser and a packet of notebook paper. She then bought three more items. After shopping, she did not have any money left. What three items did she purchase?

a binder and two markers

3–4

Reteach

Problem-Solving Skill

Reasonable Answers

After you solve a problem, it is important to check if your answer makes sense. One way to check if your answer is reasonable is to use estimates.

Use this exercise to learn more about checking whether an answer is reasonable.

Jorge has 243 baseball cards, and 198 cards are infielders. Jorge thinks he has about 50 outfielder cards. Is this reasonable?

Understand
You know there are 243 cards.
You know that 198 cards are infielder cards.
You need to find out if 50 outfielder cards is a reasonable answer.

Plan
Choose a strategy. You are finding part of a group.
You will estimate and subtract to find about how many cards are left.
You will also subtract to find the exact answer.

Solve
First, estimate by rounding to the nearest 10.
243 – 198 turns into 240 – 200 = 40
Then subtract. 243 – 198 = 45

Check
Look back at the problem. Jorge’s guess was that he had 50 outfielder cards. That is close to the estimate of 40. Jorge’s guess is reasonable.
Also check your answer by working the problem backwards:
45 + 198 = 243
Since 243 is the number you started your subtraction with, your answer is correct.
Solve. Check for reasonableness.

1. Angel’s family is having dinner. The pizza delivery will cost $12. Angel has one $20-bill to pay for the pizza. Is it reasonable for Angel to expect about $10 in change from the delivery person? __Yes__
   Use estimates to explain.
   
   $20 - $10 = $10

2. Holly wants to buy her 3 favorite movies. They cost $19, $16, and $18. She estimates that she will need $60 to buy the 3 movies. Is this a reasonable estimate? __Yes__
   Explain.
   $19, $16, and $18 each round to 20. $20 + $20 + $20 = $60.

3. Vanessa kicked the soccer ball at the goal 117 times yesterday. She kicked the ball 112 times today. Is it reasonable for Vanessa to say that she kicked the ball about 300 times? __No__
   Explain.
   117 + 112 = 229.
   Rounded to the nearest hundred, 229 is about 200.

4. Greg read 10 books last week and 12 books this week. Is it a reasonable estimate to say that he read 20 books? __Yes__
   Explain.
   10 + 12 = 22.
   Rounded to the nearest ten, 22 is 20.

5. Adrian estimates that he will need to bring 90 cookies for the third-grade picnic. There are 32 students in room 1, 31 students in room 2, and 31 students in room 3. Is 90 cookies a reasonable estimate? __Yes__
   Explain.
   32 + 31 + 31 = 94. Rounded to the nearest ten, 94 is 90.

6. Jacqueline wants to buy a book and a CD. The book is $4. The CD is $13. She estimates that she will need $15 will be enough money. Is this a reasonable estimate? __No__
   Explain.
   13 + 4 = 17; 17 > 15

7. Dominique called her grandmother 17 times in July. She estimates that she called about half the days in July. Is this reasonable? __Yes__
   Explain.
   31 rounded to the nearest 10
   Is 30. 15 is half of 30. 17 is close to 15.
Name ______________________ Date __________

**Homework Practice**

**Problem-Solving Skill**

**Solve. Check for reasonableness.**

1. This weekend Emily drew 4 pictures for her friend. Then she drew 3 pictures for her grandmother and 2 pictures for her brother. She said she drew about 10 pictures. Is this reasonable? **yes**
   
   Explain. \[4 + 3 + 2 = 9\]
   
   9 is close to 10.

2. Elizabeth has 13 yarn bracelets. She wants to have 20. She estimates she will need to make about 10 bracelets. Is this reasonable? **yes**
   
   Explain. \[20 - 13 = 7\]
   
   7 is close to 10.

3. Megan and Daniel have a bag of 150 raisins. Megan eats 11 raisins, and Daniel eats 12. They think there are 130 raisins left in the bag. Is 130 a reasonable estimate? **yes**
   
   Explain. 11 rounded to the nearest ten is 10. 12 rounded to the nearest ten is 10. 150 - 10 - 10 = 130.

**Spiral Review**

Subtract. (Lesson 3–3)

4. \[\$0.71 - \$0.54 = \$0.17\]
   
5. \[\$0.57 - \$0.24 = \$0.33\]
   
6. \[\$0.54 - \$0.38 = \$0.16\]
   
7. \[\$0.81 - \$0.32 = \$0.49\]

8. \[64 - 33 = 31\]
   
9. \[77 - 51 = 26\]
   
10. \[\$0.52 - \$0.37 = \$0.15\]

11. \[81 - \$35 = \$46\]

12. \[\$71 - \$36 = \$35\]

13. \[\$71 - \$65 = \$6\]

---

**Enrich**

**Find the Missing Digits**

Use what you know about addition and subtraction fact families to find the missing digits. You may need to regroup.

1. \[\begin{array}{c}
4 \quad 6 \\
- \quad 2 \quad 8 \\
\hline
4 \quad 3 
\end{array}\]

2. \[\begin{array}{c}
0 \quad 1 \\
- \quad 3 \quad 1 \\
\hline
2 \quad 9 \quad 2 
\end{array}\]

3. Explain how you could solve these kinds of problems when there are digits missing.

   - Answers will vary; possible answer: I used what I knew about addition facts.
   - Answers will vary; possible answer: I used what I knew about subtraction facts.

4. \[\begin{array}{c}
\triangle + \square = 15 \\
\hline
\bigcirc = 5 
\end{array}\]

5. \[\begin{array}{c}
\bigtriangleup + \bigtriangleup = 17 \\
\hline
\bigtriangleup = 9 
\end{array}\]

6. \[\begin{array}{c}
\square + \triangle = 79 \\
\hline
\triangle = 33 
\end{array}\]

7. \[\begin{array}{c}
\bigcirc + \square = 419 \\
\hline
\bigcirc = 56; \triangle = 23 
\end{array}\]

8. Why must the order of the shapes be the same when solving both the addition and subtraction problems?

   - Answers will vary; possible answer: The shape with the larger number must be first so you can subtract.
Reteach
Three-Digit Subtraction with Regrouping

You can use models to help you regroup when you subtract.

Remember:
• Regroup 1 ten as 10 ones.
• Rename 63 as 5 tens 13 ones.

Use models to subtract.
1. 245 – 19 = 226
2. 193 – 44 = 149
3. 435 – 219 = 216
4. 564 – 228 = 336
5. 740 – 426 = 314
6. 335 – 127 = 208

Subtract. Check your answer.
7. 962 – 722 = 240
8. 681 – 361 = 320
9. 750 – 136 = 614
10. 435 – 219 = 216
11. 865 – 839 = 26
12. 942 – 927 = 15

Skills Practice
Three-Digit Subtraction with Regrouping

Subtract. Check your answer.
1. 597 – 318 = 279
2. 270 – 121 = 149
3. 464 – 128 = 336
4. 743 – 206 = 537
5. 632 – 427 = 205
6. 560 – 335 = 225
7. 823 – 426 = 397
8. 936 – 319 = 617
9. 448 – 329 = 119
10. 840 – 321 = 519

ALGEBRA Find each missing digit.
11. 51 – 31 = 20
12. 432 – 19 = 413
13. 61 – 22 = 39
14. 740 – 10 = 730
15. 49 – 28 = 21
16. 432 – 313 = 119
3-5

Name __________________________ Date __________________________

Homework Practice
Three-Digit Subtraction with Regrouping

Subtract. Check your answer.

1. \[381 - 165 = 216\]
2. \[441 - 57 = 384\]
3. \[8.50 - 2.43 = 6.07\]
4. \[3.19 - 1.75 = 1.44\]
5. \[224 - 115 = 109\]
6. \[356 - 178 = 178\]
7. \[802 - 334 = 468\]
8. \[4.67 - 1.82 = 2.85\]
9. \[5.21 - 3.75 = 1.46\]
10. \[6.33 - 2.45 = 3.88\]

ALGEBRA Find each missing digit.

11. \[5 \Box 4\]
12. \[3 \Box 5\]
13. \[\Box 9\]

Solve.

1. There were 175 peaches at the fruit stand. Customers bought 82 of the peaches. How many peaches are left?

   \[93\] peaches

   Did you need to regroup ones? \[\text{No}\]
   Did you need to regroup tens? \[\text{Yes}\]

2. Another crate has 272 red and green apples. There are 123 red apples in the crate. How many apples are green?

   \[149\] green apples

   Did you need to regroup ones? \[\text{Yes}\]
   Did you need to regroup tens? \[\text{No}\]

3. Tanisha bought a pack of 225 sheets of paper for her homework. After a week, she has 198 sheets of paper left. How many sheets of paper did Tanisha use?

   \[27\] sheets

4. The school library would like to raise $915 to buy more books. So far, the library has raised $475. How much more money does the library need to reach its goal?

   \[\text{No}\] more

5. The health food store had 254 granola bars. They sold 85 bars yesterday and another 78 bars today. How many granola bars does the store have left?

   \[91\] granola bars

6. Evan has 85 baseball cards and 129 basketball cards. Alan has 312 football cards. Who has more cards in all?

   \[\text{Yes}\] more cards

Solve. 

Excelhttps://www.macmillanmh.com/edupath/correlation/ground truth 1.png

Spiral Review (Lesson 3–4)

15. Pedro made 125 glasses of lemonade to sell at his stand. At the end of the day, there were 19 glasses left. He estimates that he sold about 100 glasses that day. Is this reasonable? \[\text{Yes}\]

   Explain. \[125 - 19 = 106, \text{which is close to 100}\.

16. Brianna picked up 99 cans cleaning up the park last week with her scout troop. This week they picked up 312. She estimates that the troop picked up about 200 more cans this week. Is this reasonable? \[\text{Yes}\]

   Explain. \[312 - 99 = 213, \text{which is about 200}\.

Answers (Lesson 3–5)
Sometimes you can solve a problem using more than one strategy. You must choose the strategy that works best for you when solving the problem.

Use this exercise to learn more about choosing a strategy to solve a problem.

Tristan has $4.35. If he buys a ball for $2.13, how much money does he have left?

**Understand**

- What do you know?
  - You know Tristan has $4.35.
  - You know Tristan spent $2.13.

- What do you need to find?
  - You need to find out how much money Tristan has left.

**Plan**

A four-step plan is a good way to solve many problems.

When you read the problem to find out what information you know, circle key facts or words and underline what you need to find out.

Since you need to find how much money is left, subtract.

**Solve**

First take the money Tristan started with: $4.35
Subtract what he spent: $2.13
To find what is left: $4.35 – $2.13 = $2.22

**Check**

Prove your answer:
Look at the problem again. Work backwards to check:
$2.22 + $2.13 = $4.35

---

**Enrich**

**Feeding the Bears**

Brownie is a brown bear and Ben is a black bear. They are rescued bears that live at a wild animal park. Both eat a special mix of vegetables and dry dog food every day. The park starts each week with 800 pounds of food for each animal. Then it keeps track of how much Brownie and Ben eat. Use the chart to help you answer the questions. (Hint: Be sure to use regrouping when you subtract.)

<table>
<thead>
<tr>
<th>Bears</th>
<th>Food for the Week</th>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brownie</td>
<td>800 pounds</td>
<td>92</td>
<td>95</td>
<td>87</td>
<td>88</td>
<td>90</td>
<td>86</td>
<td>93</td>
</tr>
<tr>
<td>Ben</td>
<td>800 pounds</td>
<td>80</td>
<td>82</td>
<td>83</td>
<td>85</td>
<td>84</td>
<td>79</td>
<td>79</td>
</tr>
</tbody>
</table>

1. How much more food did Brownie eat than Ben ate from Sunday to Tuesday?
   - **29 pounds**

2. How much food did each bear have left after Saturday's feeding?
   - Brownie had **169 pounds**
   - Ben had **228 pounds**

3. The park wants to buy just enough food, so that there isn't any left over. How much food will it buy for each bear?
   - For Brownie **631** pounds
   - For Ben **572** pounds

4. What is the difference in the amount the two bears ate by the end of this week?
   - **59 pounds**
Practice

Use any strategy shown below to solve. Tell what strategy you used.

• Estimate or an exact answer  • Reasonable answer  • Four-Step Plan

1. The animal shelter rescued 57 animals after the storm. Now there are 862 animals at the shelter. How many animals were there before the storm? ___________
   What strategy did you use? ___________

2. Mrs. Connolly hid 115 prizes around the school. She gave her students clues to solve. Her students found 82 prizes. About how many prizes are still missing? ___________
   What strategy did you use? ___________


3. Two cans of paint come in a box. Trevor saw a sign that says each can of paint costs $27. About how much will the box of paints cost? ___________
   What strategy did you use? ___________

4. Natalie started the day with 178 bags of trail mix. Now she has 50 bags of trail mix left. Is it reasonable to say she gave away about 130 bags of trail mix? ___________
   What strategy did you use? ___________

5. Connor’s grandfather gave him 87 baseball cards. Now he has 576 cards. How many cards did he have before his grandfather gave him more cards? ___________
   What strategy did you use? ___________

6. Sabrina has $8.35. She spent $6.74 at the store. How much money does she have left? ___________
   What strategy did you use? ___________

7. Mrs. Martinez bought groceries for $47. Then she bought pet food for $26. She thinks she spent about $100. Is this reasonable? ___________
   What strategy did you use? ___________
Homework Practice
Problem-Solving Investigation

Use any strategy shown below to solve. Tell what strategy you used.
• Estimate or an exact answer  • Reasonable answer  • Four-Step Plan

1. Mark is buying apples. They are $1.49 per pound. He wants to buy 2 pounds. How much will he spend on apples?

   $2.98
   
Sample answer: Four-Step Plan

2. Gabriel has 15 baseballs. He used to have 53 baseballs but lost some when he moved. How many baseballs did he lose?

   38 baseballs
   
sample answer: reasonable answers

3. Abbie has 287 beans on her plate. Her mother says she must eat until there are only 35 beans left. How many beans must Abbie eat?

   252 beans
   
sample answer: estimate or an exact answer

Enrich
Problem-Solving Investigation

There are four boys in the Branch family. The chart below shows how much money each boy earned each week for three weeks.

<table>
<thead>
<tr>
<th>Week</th>
<th>Brad</th>
<th>Bart</th>
<th>Burt</th>
<th>Brent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$2.25</td>
<td>$4.00</td>
<td>$5.50</td>
<td>$4.50</td>
</tr>
<tr>
<td>2</td>
<td>$6.40</td>
<td>$3.85</td>
<td>$2.75</td>
<td>$5.25</td>
</tr>
<tr>
<td>3</td>
<td>$3.50</td>
<td>$1.20</td>
<td>$3.80</td>
<td>$3.75</td>
</tr>
</tbody>
</table>

**Circle the statement that is reasonable.**

1. Burt and Brad are comparing how much money they made over three weeks.
   Burt said, “I made about $10.00 more than Brad.”
   Brad said, “We both made about the same amount of money.”

   Brad’s statement should be circled
   they both made about $12
   
   Explain your thinking: answers may vary

2. Bart and Brent are thinking about how much money Brad made for weeks 2 and 3.
   Bart said, “Brad made about $3.00 less in Week 3 than in Week 2.”
   Brent said, “Brad made about $2.00 less in Week 3 than in Week 2.”

   either statement might be circled
   answers may vary
   
   Explain your thinking: answers may vary

3. Brad and Brent plan to make the same amount of money in Week 4 that Brad made in Week 2. They are thinking about who will have made the most money after four weeks.
   Brad says, “I will have made more money.”
   Brent says, “I will have made more money.”

   Brent’s statement should be circled
   answers will vary
   
   Explain your thinking: answers will vary

ALGEBRA Find each missing digit. (Lesson 3–5)

4. \(4 \, \underline{2} \, 1\)
   \(-1 \, 5 \, 6\)
   \(\underline{6} \, 5\)

5. \(2 \, 2 \, 4\)
   \(-1 \, 6 \, 6\)

6. \(5 \underline{2} 6\)
   \(-3 \, 2 \, 1\)
   \(\underline{2} \, 5\)

Spiral Review

Grade 3

A16

Answers (Lesson 3–6)
3–7 Name ___________ Date ___________ 3N5.2.1

**Recreate**

**Subtract Greater Numbers**

Find 6,426 − 3,278.

Subtract the ones.
Regroup if necessary.
2 tens 6 ones = 1 ten 16 ones
Subtract the tens.
Regroup if necessary.
4 hundreds 1 ten = 3 hundreds 11 tens
Subtract the hundreds and thousands.

<table>
<thead>
<tr>
<th>Thousands</th>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>4</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>− 1</td>
<td>2</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3,406</td>
<td>7,401</td>
<td>6,095</td>
<td>1,373</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>613</td>
</tr>
</tbody>
</table>

1. 6,485 − 1,279 = 5,206
2. 9,354 − 1,953 = 7,401
3. 6,527 − 432 = 6,095
4. 8,711 − 7,358 = 1,373
5. 6,345 − 5,232 = 1,113

6. 8,832 − 448 = 8,384
7. 4,213 − 2,999 = 1,214
8. 9,595 − 1,396 = 8,199
9. 6,762 − 3,883 = 2,879
10. 9,136 − 457 = 8,679

11. 8,447 − 4,191 = 4,256
12. 6,229 − 5,337 = 892
13. 8,674 − 482 = 8,192
14. 1,373 − 998 = 375
15. 7,147 − 2,639 = 4,508
16. 9,521 − 3,587 = 5,934
17. 5,212 − 1,999 = 3,213
18. 6,222 − 2,730 = 3,492
19. 8,315 − 798 = 7,517
20. 7,445 − 655 = 6,790
21. 4,123 − 1,432 = 2,691
22. $3,328 − $625 = 2,603

**Skills Practice**

**Subtract Greater Numbers**

Subtract. Check your answer.

| 1. 6,387 − 192 = | 2. 6,217 − 3,860 = | 3. 9,817 − 2,087 = | 4. 1,754 − 382 = | 5. 3,498 − 2,567 = |
| 6,195 | 2,357 | 7,730 | 1,372 | 931 |
| 6. 4,891 − 975 = | 7. 3,165 − 1,620 = | 8. 9,315 − 4,928 = | 9. 4,646 − 2,995 = | 10. 6,635 − 669 = |
| 3,916 | 1,545 | 4,387 | 1,651 | 5,966 |
| 5,337 | 7,491 | 587 | 1,277 | 6,759 |
| 16. 4,998 − 3,192 = | 17. 8,277 − 6,092 = | 18. 5,123 − 987 = | 19. 7,654 − 6,666 = | 20. 4,935 − 998 = |
| 1,806 | 3,185 | 4,136 | 988 | 3,327 |
| 21. 6,172 − 85 = | 22. 6,286 − 5,375 = | 23. 5,352 − 2,448 = | 24. 8,734 − 4,292 = | 25. 8,132 + 93 = |
| 6,087 | 911 | 2,904 | 4,442 | 1,161 |
| 26. 8,032 + 983 = | 27. 8,225 − 6,334 = | 28. On a parade float, there are 3,732 red roses and 1,850 white roses. How many more red roses are there? 1,882 |
| 9,115 | 1,891 | 3,578 | 29. Of the 4,258 roses on another float, 680 were wilted. How many were not wilted? 3,578 |
3-7
Grade 3

Name __________________________  Date __________________________

Homework Practice

Subtract Greater Numbers

Subtract.

1. 1,816
   - 429
   ________
2. 3,659
   - 2,485
   ________
3. 4,718
   - 1,962
   ________
4. 7,613
   - 5,549
   ________
5. 1,237
   - 683
   ________
6. 2,689
   - 1,156
   ________
7. 2,879
   - 1,675
   ________
8. 3,466
   - 2,132
   ________
9. 4,768
   - 3,021
   ________
10. 7,547
    - 5,223
     ________

11. A trail is 5,386 feet long. Chloe has already walked 1,753 feet. How much farther does she need to walk to complete the trail?

   ________

12. Seth has 2,374 Legos to build with. He used 1,142 to build a car. How many Legos does he have left?

   ________

Spiral Review

Use any strategy shown below to solve. Tell what strategy you used. (Lesson 3–6)

13. 15 friends were playing at the park. 2 left to go to soccer practice. 4 left to go home. Three more left to go to the library. How many friends are left at the park?

   ________

14. Seth’s bus brings 37 kids to school. The next bus brings 42. If 118 kids come to school by bus, how many are on the third bus?

   ________

Answers (Lesson 3–7)

Problem-Solving Practice

Subtract Greater Numbers

Solve.

1. A library has 2,222 books about sports and 1,814 books about animals. How many more sports books are there than animal books?

   ________ more books

2. There were 3,631 books at the book sale. There are now 1,435 books left. How many books were sold?

   ________ books

3. In the 2007 NFL season, a receiver rushed 1,139 yards, and a running back rushed for 1,435 yards. How many more yards were rushed by the running back than the receiver?

   ________ more yards

4. Pittsburgh University won the college football championship in 1937. They won again in 1976. How many years were there between championships?

   ________ years

5. Carl has 1,253 marbles in a jar. He took 346 marbles out of the jar. How many marbles are left in the jar?

   ________ marbles

6. A stadium has 8,535 seats. At the game, there were still 1,956 seats left. How many seats were sold?

   ________ seats

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Sand and Sea Park is checking the weight of its animals. The chart shows which animals they have. It also shows which ones they have weighed and how many pounds each weighs. The walrus and sea lion have not been weighed. Answer the questions and complete the chart.

<table>
<thead>
<tr>
<th>Animal</th>
<th>dolphin</th>
<th>harbor seal</th>
<th>killer whale</th>
<th>polar bear</th>
<th>walrus</th>
<th>sea lion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>573</td>
<td>375</td>
<td>8,356</td>
<td>1,342</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. The walrus weighs 5,619 pounds less than the killer whale. How much does it weigh? **2,737** pounds

2. The sea lion weighs 610 pounds less than the polar bear. How much does it weigh? **732** pounds

3. What is the difference in weight between the animal that weighs the least and the animal that weighs the most? **7,981** pounds

4. What is the difference in weight between the sea lion and the walrus? **2,005** pounds

5. How much more does the sea lion weigh than the dolphin? **159** pounds

You can use place-value charts to help you regroup across zeros.

Find 305 – 176.

**Step 1**
Subtract the ones.
No tens to regroup.
Regroup the hundreds.

<table>
<thead>
<tr>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

**Step 2**
Regroup the tens.

<table>
<thead>
<tr>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>9</td>
<td>6</td>
</tr>
</tbody>
</table>

**Step 3**
Subtract the ones, tens, and hundreds.

<table>
<thead>
<tr>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
</tbody>
</table>

Subtract. Check your answer.

1. 106
   \[78 - 28 = 48\]
   \[\text{No tens to regroup. Regroup the hundreds.}\]

2. $503
   \[\$336 - \$167 = \$169\]
   \[\text{Regroup the hundreds.}\]

3. 405
   \[\frac{3}{2} - \frac{1}{2} = \frac{1}{2}\]
   \[\text{No tens to regroup. Regroup the hundreds.}\]

4. $601
   \[\$223 - \$145 = \$78\]
   \[\text{Regroup the hundreds.}\]

5. 200
   \[\frac{5}{2} - \frac{1}{2} = \frac{4}{2}\]
   \[\text{Regroup the hundreds.}\]

6. 205
   \[\frac{7}{2} - \frac{1}{2} = \frac{6}{2}\]
   \[\text{Regroup the hundreds.}\]

7. $308
   \[\$133 - \$90 = \$43\]
   \[\text{Regroup the hundreds.}\]

8. 802
   \[\frac{9}{2} - \frac{1}{2} = \frac{8}{2}\]
   \[\text{Regroup the hundreds.}\]

9. $505
   \[\$415 - \$39 = \$416\]
   \[\text{Regroup the hundreds.}\]

10. 802
   \[\frac{9}{2} - \frac{1}{2} = \frac{8}{2}\]
   \[\text{Regroup the hundreds.}\]

11. 500
   \[82\]
   \[\text{No tens to regroup. Regroup the hundreds.}\]

12. $206
   \[\$138 = \$68\]
   \[\text{Regroup the hundreds.}\]

13. 801
   \[319\]
   \[\text{No tens to regroup. Regroup the hundreds.}\]

14. 100
   \[67\]
   \[\text{No tens to regroup. Regroup the hundreds.}\]

15. 607
   \[80\]
   \[\text{Regroup the hundreds.}\]

16. $700
   \[\$19 = \$681\]
   \[\text{Regroup the hundreds.}\]

17. $902
   \[\$863 = \$39\]
   \[\text{Regroup the hundreds.}\]

18. 400
   \[211\]
   \[\text{Regroup the hundreds.}\]
Spiral Review
Subtract. (Lesson 3–7)

   –389 –1,343 –$1,836 –$1,762
   1,037 912 $1,842 $3,729

17. Morgan has a high score of 9,875 on her favorite game. Her brother can score 6,548. What is the difference between their scores?

   3,327 points
Problem-Solving Practice
Subtract Across Zeros

Solve.

1. The best bowler in the Junior Bowler’s League scored 150 points. Jason scored 125 points. How many points higher did the best bowler score than Jason?

   25 points higher

2. There are 70 bowlers in the league this year. There were only 54 bowlers last year. How many more bowlers joined the league this year?

   16 more bowlers

Use the chart to solve.

3. How many more votes did the winner get than Miguel?

   53 more votes

4. How many more votes did Tyrone need to win the election?

   30 more votes

Solve.

5. Harrison and Jordan played 3 computer games. Jordan scored 124 points in the first game and 268 points in the second game. Harrison scored a total of 600 points for all 3 games. How many points does Jordan need in the third game to beat Harrison’s score?

   209 points

6. Keisha is saving money for a new computer that costs $480. She has saved $175. She found a coupon for $50 off the price of the computer. How much more money does Keisha need to save to buy the computer?

   $255 more

Enrich
Subtraction Pinwheels

Find the missing numbers in each subtraction pinwheel. Remember to regroup when subtracting across zeros.

1. 83 - B = 317

2. G - I = 1,732

3. L - E = 486

4. Q - S = 1,572

5. Match the difference with a number shown under the lines below. Write the letter of the difference from the box on the line to write a mystery message.

   r e g r o u p

   1,483 277 1,732 1,483 86 1,800 999

   $1,299

   709

   525

   208

   1,800

   1,009

   574

   6,426

   126

   55

   345

   123

   6,714

   5,268

   498

   7,000

   6,173

   827

   232

   297

   173

   124

   417

   1,483

   277

   1,732

   1,483

   86

   1,800

   999
Reteach

Algebra: Expressions and Number Sentences

An expression uses numbers and symbols to make a math statement. Here are some examples of expressions:

\[ 6 + 8 \quad 5 - 2 + 10 \quad 12 - 5 \]

A number sentence uses an equals sign to show that two expressions are equal. Here are some examples of true number sentences:

\[ 7 + 8 = 15 \quad 5 + 2 + 1 = 8 \quad 15 - 5 = 10 \]

Write an expression and a number sentence for each problem. Then solve.

1. A Douglas fir tree is 100 meters tall. A Ponderosa pine tree is 68 meters tall. How much taller is the Douglas fir than the Ponderosa pine?
   
   What is the expression?
   \[ 100 - 68 \]
   
   What is the number sentence?
   \[ 100 - 68 = 32 \]
   
   The Douglas fir is ______ meters taller than the Ponderosa pine.

2. Tony’s Garden Supplies sells $525 worth of plants. The store also sells $234 worth of supplies. How much money does the store make in all?
   
   \[ $525 + $234 = $759 \]

3. A tree farm has 248 balsam fir trees and 96 Douglas fir trees. How many more balsam firs are there than Douglas firs?
   
   \[ 248 - 96; 248 - 96 = 152 \]

Skills Practice

Algebra: Expressions and Number Sentences

Write an expression and a number sentence for each problem. Then solve.

1. A black spruce tree is 32 feet tall. An Engelmann pine tree is 110 feet tall. How much taller is the Engelmann pine than the black spruce?
   
   \[ 78 \text{ feet;} \quad 110 - 32 = 78 \]

2. A live oak tree is 48 feet tall. A California white oak tree is 42 feet taller. How tall is the California white oak?
   
   \[ 90 \text{ feet;} \quad 48 + 42 = 90 \]

3. The garden club raises $123 for a community garden. The club spends $78 on supplies. How much money does the garden club have left?
   
   \[ $45; \quad $123 - $78 = $45 \]

4. Nadia’s garden has a length of 45 feet and a width of 32 feet. How much longer is the length than the width?
   
   \[ 13 \text{ feet} \]

Tell whether + or − makes each number sentence true.

5. \[ 8 \quad 1 + 4 = 3 \]

6. \[ 521 + 10 = 20 + 511 \]

7. \[ 7 - 1 = 3 + 1 \]

8. \[ 701 - 23 = 663 + 15 \]

9. \[ 12 + 5 = 10 + 7 \]

10. \[ 16 + 14 = 50 - 20 \]

11. \[ 15 - 9 = 3 + 3 \]

12. \[ 75 - 9 = 60 + 6 \]

13. \[ 111 - 11 = 50 - 50 \]

14. \[ 94 + 17 = 180 - 69 \]
Write an expression to describe each problem. Then solve.

1. Luis needs 4 blue marbles, 8 striped marbles, 12 green marbles, and 18 red marbles for his game. How many marbles does he need?

   \[4 + 8 + 12 + 18 = 42 \text{ marbles}\]

2. Shelby made 15 bracelets. Her mother made 43. How many more bracelets did Shelby’s mother make?

   \[43 - 15 = 28 \text{ bracelets}\]

Use the data to write a number sentence for each of the following.

<table>
<thead>
<tr>
<th>Favorite Sports</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lacrosse</td>
<td>28</td>
</tr>
<tr>
<td>Soccer</td>
<td>85</td>
</tr>
<tr>
<td>Football</td>
<td>35</td>
</tr>
<tr>
<td>Volleyball</td>
<td>21</td>
</tr>
<tr>
<td>Basketball</td>
<td>87</td>
</tr>
</tbody>
</table>

3. sum of votes for soccer and football  

   \[85 + 35 = 120\]

4. sum of votes for basketball and volleyball  

   \[21 + 87 = 108\]

5. difference of votes for soccer and lacrosse  

   \[85 - 28 = 57\]

Spiral Review

Subtract. Check for reasonableness. (Lesson 3–8)

<table>
<thead>
<tr>
<th>6. 200 (-43)</th>
<th>7. 302 (-166)</th>
<th>8. 400 (-248)</th>
<th>9. 601 (-526)</th>
</tr>
</thead>
<tbody>
<tr>
<td>157</td>
<td>136</td>
<td>152</td>
<td>75</td>
</tr>
</tbody>
</table>

5. Write your own problem that has an answer of $37.

   Answers will vary. See students’ work.
Fill in the missing signs. Write + or – in the box. Write =, <, or > in the circle to make the following number sentences true.

1. 9 \[ 5 + 3 \] 9 – 4 \[ - \text{ or } +; > \]
2. 4, 925 \[ 1,679 \] .245 \[ >, + \]
3. \[ \text{ } + \text{ } \] + 2 \[ =, >, < \] 1 \[ \text{ answers may be either } + \text{ and } > \text{ or } - \text{ and } < \]
4. 100 \[ \text{ } \] the number days in a week \[ 94 \] + and > or - and <
5. \[ \text{ } \] 27 \[ 36 \] 72 \[ 9 \] several possible answers: +, +, =, +; or +, +, =, +; or +, -; or +, -, <; + (or -)
6. 456 \[ \text{ } \] 25 \[ 25 \] 456 \[ +, =, + \]
7. 8,005 \[ 5008 \] 2,997 \[ >; or - = \]
8. 87 rounded \[ 58 \] rounded is \[ 140 \].

Write a number sentence to show how you rounded to make the number sentence true.

Answers will vary depending how students round and if they choose < or >;

Possible answers are \[ 90 + 60 > 140; 80 + 50 < 140; 90 - 60 < 140; 80 - 50 < 140. \]
Oral Assessment

Arrange a selection of pencils, crayons, and paper. Include six of each. Line up the objects in rows on a table.

Read each question aloud to the student. Then write the student’s answers on the lines below the question.

1. How many objects do we have?
   18 objects

2. If I take away these six objects and these three objects, how many objects will I have left?
   9 objects

3. How many will I have if I take away two more objects?
   7 objects

4. Tell how you got your answer.
   Accept reasonable answers.

5. Let’s line up six pencils and four crayons. How many more pencils than crayons do we have?
   2 more

6. Tell how you got your answer.
   Accept reasonable answers.

7. If I have $4 and buy a can of juice for $1, how much money do I have left?
   $3

8. Tell how you got your answer.
   Accept reasonable answers.

9. If my bean plant is 12 inches tall and my sunflower plant is 7 inches tall, how much taller is my bean plant?
   5 inches

10. Tell how you got your answer.
    Accept reasonable answers.

11. If a sweater costs $17 and a shirt costs $8, about how much less does the shirt cost?
    about $10

12. Do we need an exact answer or an estimate answer?
    estimate answer

13. How can you tell?
    The question asks “about how much.”
## Chapter 3 Assessment Answer Key

### Diagnostic Assessment

**Page 54**

<p>| | |</p>
<table>
<thead>
<tr>
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<td>11</td>
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### Chapter Pretest

**Page 55**

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<td>89</td>
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<td>70 – 50 = 20</td>
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<tr>
<td>8</td>
<td>90 – 40 = 50</td>
</tr>
<tr>
<td>9</td>
<td>70 – 10 = 60</td>
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<tr>
<td>10</td>
<td>596</td>
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<td>325</td>
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### Quiz 1 (3–1 through 3–3)

**Page 56**

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<td>$62</td>
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<td>4</td>
<td>$209</td>
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<td>5</td>
<td>90 – 80 = 10</td>
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<td>6</td>
<td>90 – 40 = 50</td>
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<td>7</td>
<td>50 – 30 = 20</td>
</tr>
<tr>
<td>8</td>
<td>700 – 100 = 600</td>
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<tr>
<td>9</td>
<td>400 – 200 = 200</td>
</tr>
<tr>
<td>10</td>
<td>200 – 100 = 100</td>
</tr>
<tr>
<td>11</td>
<td>300 – 200 = 100; about 100 books</td>
</tr>
<tr>
<td>12</td>
<td>$49</td>
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</table>
Chapter 3 Assessment Answer Key

Quiz 2 (3–4 through 3–6)

Page 57

1. 87
2. 46
3. 237
4. 87
5. 288
6. 563

7. Yes; \(550 - 157 = 393\), which is close to 400.

8. 50; estimate

9. 417 tickets; exact answer

Quiz 3 (3–7 through 3–9)

Page 58

1. 1,863
2. $1,637
3. 809
4. $2,596
5. 197

6. \(8 + 9; 8 + 9 = 17 \text{ runs}\)

7. 
8. 

9. 

10. Yes; \(57 - 38 = 19\). 19 is close to 20.

Mid-Chapter Review

Page 59

1. A
2. D
3. C
4. 15
5. 43¢
6. $0.16

7. 90 - 40 = 50
8. 70 - 60 = 10
9. 40 - 20 = 20
## Chapter 3 Assessment Answer Key

### Chapter Test, Form 1

Page 65

| 1. | B |
| 2. | H |
| 3. | C |
| 4. | H |
| 5. | B |
| 6. | H |
| 7. | D |
| 8. | F |
| 9. | D |
| 10. | H |
| 11. | D |
| 12. | G |

### Chapter Test, Form 1 (continued)

Page 66

| 1. | B |
| 2. | F |
| 3. | D |
| 4. | H |
| 5. | A |
| 6. | G |
| 7. | D |
| 8. | H |

### Chapter Test, Form 2A

Page 67

| 1. | B |
| 2. | F |
| 3. | D |
| 4. | H |
| 5. | A |
| 6. | G |
| 7. | D |
| 8. | H |

(continued on the next page)
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<td>9. <strong>B</strong></td>
<td>1. <strong>C</strong></td>
</tr>
<tr>
<td></td>
<td>2. <strong>H</strong></td>
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<td>3. <strong>A</strong></td>
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<td>9. <strong>C</strong></td>
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<td></td>
<td>10. <strong>H</strong></td>
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<tr>
<td>11. <strong>D</strong></td>
<td>11. <strong>B</strong></td>
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<td>12. <strong>G</strong></td>
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## Chapter 3 Assessment Answer Key

### Chapter Test, Form 2C

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<td>202</td>
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<td>3.</td>
<td>21</td>
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<td>4.</td>
<td>242</td>
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<td>5.</td>
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</tr>
<tr>
<td>6.</td>
<td>$60 - 20 = 40</td>
</tr>
<tr>
<td>7.</td>
<td>70 - 40 = 30</td>
</tr>
<tr>
<td>8.</td>
<td>600 - 400 = 200</td>
</tr>
<tr>
<td>9.</td>
<td>700 - 100 = 600</td>
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<tr>
<td>10.</td>
<td>$18.92</td>
</tr>
<tr>
<td>11.</td>
<td>4,029</td>
</tr>
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<td>657</td>
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<td>5,909</td>
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<td>15.</td>
<td>19</td>
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<tr>
<td>16.</td>
<td>no; $5.25 + $3.10 + $5.25 &gt; $5.00 + $5.00</td>
</tr>
<tr>
<td>17.</td>
<td>about 200 people</td>
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<tr>
<td>18.</td>
<td>245 - 64 = 181</td>
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<tr>
<td>19.</td>
<td>50¢ - 40¢</td>
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<tr>
<td>20.</td>
<td>65¢</td>
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### Chapter Test, Form 2D

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<td>3.</td>
<td>21</td>
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<tr>
<td>4.</td>
<td>242</td>
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<tr>
<td>5.</td>
<td>$157</td>
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<tr>
<td>6.</td>
<td>$60 - 20 = 40</td>
</tr>
<tr>
<td>7.</td>
<td>70 - 40 = 30</td>
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<tr>
<td>8.</td>
<td>600 - 400 = 200</td>
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<tr>
<td>9.</td>
<td>700 - 100 = 600</td>
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<tr>
<td>10.</td>
<td>$18.92</td>
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<td>$16.39</td>
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### Chapter 3 Assessment Answer Key

#### Chapter Test, Form 2D
**Page 74**

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<tbody>
<tr>
<td>13.</td>
<td>29</td>
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<tr>
<td>14.</td>
<td>no; $5.95 + $2.00 + $5.95 &gt; $5.00 + $5.00</td>
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<tr>
<td>15.</td>
<td>about 200</td>
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<th>Question</th>
<th>Answer</th>
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</thead>
<tbody>
<tr>
<td>245 – 57</td>
<td>= 188</td>
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#### Chapter Test, Form 3
**Page 75**

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<th>Question</th>
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<td>242</td>
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<td>$3.09</td>
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<tr>
<td>4.</td>
<td>202</td>
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<td>5.</td>
<td>$157</td>
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<th>Question</th>
<th>Answer</th>
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<tbody>
<tr>
<td>600 – 400</td>
<td>= 200</td>
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<th>Answer</th>
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<tbody>
<tr>
<td>6.</td>
<td>$6.25 + $2.10 + $6.25 &gt; $5.00 + $5.00</td>
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<tr>
<td>7.</td>
<td>$60 – 20 = 40</td>
</tr>
<tr>
<td>8.</td>
<td>$70 – 40 = 30</td>
</tr>
</tbody>
</table>

<table>
<thead>
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<th>Question</th>
<th>Answer</th>
</tr>
</thead>
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<td>10.</td>
<td>$16.39</td>
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<tr>
<td>11.</td>
<td>657</td>
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<tr>
<td>12.</td>
<td>$18.92</td>
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<tr>
<td>13.</td>
<td>4,029</td>
</tr>
<tr>
<td>14.</td>
<td>5,909</td>
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<td>16.</td>
<td>29, $58.00</td>
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<td>18.</td>
<td>$245 – 57; $245 – 57 = 188</td>
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<tbody>
<tr>
<td>19.</td>
<td>25¢ – 10¢ = 15¢</td>
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<td>20.</td>
<td>65¢</td>
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### Chapter 3 Assessment Answer Key

#### Page 76, Extended-Response Test

**Scoring Rubric**

<table>
<thead>
<tr>
<th>Level</th>
<th>Specific Criteria</th>
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<tbody>
<tr>
<td>4</td>
<td>The student demonstrates a <em>thorough understanding</em> of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.</td>
</tr>
<tr>
<td>3</td>
<td>The student demonstrates an <em>understanding</em> of the mathematics concepts and/or procedures embodied in the task. The student’s response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor errors that reflect inattentive execution of the mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.</td>
</tr>
<tr>
<td>2</td>
<td>The student has demonstrated only a <em>partial understanding</em> of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student’s work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.</td>
</tr>
<tr>
<td>1</td>
<td>The student has demonstrated a <em>very limited understanding</em> of the mathematics concepts and/or procedures embodied in the task. The student’s response to the task is incomplete and exhibits many flaws. Although the student has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many errors or may be incomplete.</td>
</tr>
<tr>
<td>0</td>
<td>The student has provided a <em>completely incorrect</em> solution or uninterpretable response, or no response at all.</td>
</tr>
</tbody>
</table>
Chapter 3 Assessment Answer Key

Page 77, Extended-Response Test
Sample Answers

In addition to the scoring rubric found on page A32, the following sample answers may be used as guidance in evaluating open-ended assessment items.

1. a. Subtraction is when you subtract one number from another.

   b. Subtraction with regrouping is when you subtract and there are not enough ones to subtract. So, you need to regroup. Subtraction without regrouping is when you have enough ones to subtract.

c. You subtract money just like you subtract whole numbers, except that you align numbers by the decimal points, and you put a decimal point in the answer.

   Example:
   $5.26
   $3.04
   $2.22

2. a. You can estimate by rounding both numbers, and then subtract.

   b. I would look at the ones place of each number. If the ones place has a digit 5 or greater, then the tens digit increases by one. If the digit in the ones place is 4 or less, the number stays the same. Once the numbers are rounded, I would subtract.

3. a. It costs about $1 more to get a turkey sub than a fruit salad.

   b. It will cost about $4 to get an apple, a milk and a salad.

   c. Sari spent about $1 more than Serena.

   c. Sample problem: Melissa makes $28.50 a week babysitting. Daniel makes $36.00 dollars a week cutting grass. About how much more does Daniel make in a week than Melissa?

   Answer: About $10 more.
Chapter 3 Assessment Answer Key

Cumulative Standardized Test Practice

Page 79

1. B

2. F

3. D

4. H

Page 80

5. A

6. H

Page 81

7. B

8. H

9. B

10. J

11. $292

12. 42

13. 4,498

14. $2,950

15. 400

16. 1,155

17. 4