

Chapter Review

Objectives

- Identify and write equations for a fact family
- Complete a missing addend equation with a variable
- Identify 1,000 more or 1,000 less and 10,000 more or 10,000 less
- Round numbers to the place with the greatest value
- Estimate the sum of an addition problem with 4- or 5-digits
- Estimate the difference of a subtraction problem with 4- or 5-digits
- Solve addition and subtraction problems
- Solve word problems

Teacher Materials

- Place Value Pocket Chart Kit
- Addition/subtraction fact family flashcards: 4-8-12 and 9-9-18
- 6 index cards

Preparation

Write the following problems for display and on index cards. Place the index cards in a container. (Do not write the estimates or the answers.)

$10,000$	$9,721$	$30,000$	$34,000$
$+ 4,000$	$+ 3,675$	$+ 30,000$	$+ 25,829$
$14,000$	$13,396$	$60,000$	$59,829$
$5,000$	$5,382$		
$- 4,000$	$- 3,726$		
$1,000$	$1,656$		
$30,000$	$28,463$	$4,000$	$4,000$
$- 20,000$	$- 19,571$	$- 2,000$	$- 2,398$
$10,000$	$8,892$	$2,000$	$1,602$
$50,000$	$50,600$		
$- 30,000$	$- 27,496$		
$20,000$	$23,104$		

Notes

This lesson reviews concepts presented in Chapter 2 to prepare students for the Chapter 2 Test. Worktext pages 57–62 and Math Reviews pages 47–48 provide students with an excellent study guide.

Practice and Review

Multiplication facts

Select a Fact Fun activity from Appendix pages A10–A13 to practice previously reviewed facts. (A list of facts is provided on Appendix pages A14–A16.)

Practice facts  
8–10 minutes  
daily.

Check for Understanding

Identify equations for a fact family

1. Read aloud these facts.  
 $4 + 6 = 10$     $6 + 4 = 10$     $10 - 4 = 6$     $10 - 6 = 4$   
➤ Which 3 numbers identify this fact family? *4-6-10*
2. Display the fact family flashcard 4-8-12. Select students to name the facts in this fact family. Write the equations for display.  $4 + 8 = 12$ ,  $8 + 4 = 12$ ,  $12 - 4 = 8$ ,  $12 - 8 = 4$

- How many addition equations are in this family? 2 subtraction equations? 2
- 3. Display the fact family flashcard 9-9-18. Choose students to name the facts in this fact family.  $9 + 9 = 18$ ,  $18 - 9 = 9$   
➤ Why is there only 1 addition fact and 1 subtraction fact in this fact family? Possible answers: They are doubles; there are two 9s; the 2 addition or 2 subtraction facts would be the same.

Complete a missing addend equation

1. Write  $723 + n = 910$  for display.  
➤ What kind of equation is this? missing addend  
➤ What does the  $n$  represent? the missing addend or number  
➤ What is a missing addend equation? An equation in which you know the sum and only one of the addends; you do not know one of the addends.  
➤ How do you solve a missing addend equation? Write a related subtraction equation.  
➤ What related subtraction equation can you write to find the missing addend in this equation?  $910 - 723 = n$
2. Write  $910 - 723 = n$  below  $723 + n = 910$ . Direct the students to solve the problem to find the value of  $n$ .  
➤ What is the missing number or the value of  $n$ ? 187
3. Write  $n = 187$  below  $910 - 723 = n$ . Instruct the students to check their answer by substituting 187 for the value of  $n$  in the original problem:  $723 + 187 = 910$ .  
➤ What is  $723 + 187$ ? 910
4. Repeat the procedure for  $49 + s = 68$   $68 - 49 = s$ ,  $s = 19$  and  $n + 126 = 518$   $518 - 126 = n$ ,  $n = 392$ .

Identify 1,000 more or less and 10,000 more or less

1. Display 8,742 in the Place Value Pocket Chart. Choose a student to read the number aloud.  
➤ How do you add 1,000 to this number? Increase the One Thousands place by 1.  
Remove the 8 and put 9 in the One Thousands place.  
➤ What is 1,000 more than 8,742? 9,742
2. Display 7,345 in the pocket chart. Select a student to read the number aloud.  
➤ How many one thousands are in this number? 7  
➤ What is 1,000 less than this number? 6,345  
Remove the 7 and put 6 in the One Thousands place.
3. Display 98,521 and ask a student to read the number.  
➤ How do you add 10,000 to this number? Increase the Ten Thousands place by 1.  
➤ If you increase the Tens Thousands place by 1, how many ten thousands will you have? 10 What must you do? Rename the 10 ten thousands as 1 hundred thousand or put a zero in the Ten Thousands place and a 1 in the Hundred Thousands place.  
Remove the 9 and place 0 in the Ten Thousands place and 1 in the Hundred Thousands place.  
➤ What does  $98,521 + 10,000$  equal? 108,521  
➤ What is 10,000 less than 98,521? 88,521  
Remind the students that 10,000 less than 98,512 is the same as 1 ten thousand less than 98,512.

Round numbers to the place with the greatest value

1. Write these numbers for display. Explain that the students will round each of these numbers to the place with the greatest value.  
 $3,256$     $767$     $25,378$   
➤ Which place do you round 3,256 to? One Thousands  
➤ What one thousand do you round 3,256 to? 3,000

Write the related subtraction equation.  
Write the value for  $n$ .

1.  $7 + n = 16$     2.  $516 + n = 832$     3.  $73 + n = 121$   
 $\underline{16 - 7 = 9}$      $\underline{832 - 516 = 316}$      $\underline{121 - 73 = 48}$   
 $n = 9$      $n = 316$      $n = 48$

Round to the place with the greatest value.  
Write the number.

4. 463 500    5. 3,269 3,000    6. 65,084 70,000

Complete the table.

	1,000 less		1,000 more
7.	<u>2,126</u>	3,126	<u>4,126</u>
8.	<u>7,673</u>	8,673	<u>9,673</u>

	10,000 less		10,000 more
9.	<u>5,261</u>	15,261	<u>25,261</u>
10.	<u>44,928</u>	54,928	<u>64,928</u>



Estimate by rounding. Solve.

11. **Estimate**  
 $\underline{70,000}$   
 $+ 20,000$   
90,000  
 $\begin{array}{r} 111 \\ 65,286 \\ + 24,872 \\ \hline 90,158 \end{array}$

12. **Estimate**  
 $\underline{5,000}$   
 $\underline{3,000}$   
 $+ 4,000$   
12,000  
 $\begin{array}{r} 111 \\ 4,829 \\ 3,252 \\ + 3,524 \\ \hline 11,605 \end{array}$

13. **Estimate**  
 $\underline{\$6.00}$   
 $- \$3.00$   
 $\$3.00$   
 $\begin{array}{r} 13 \\ 5 \ 3 \ 13 \\ \$6.43 \\ - \$2.95 \\ \hline \$3.48 \end{array}$

14. **Estimate**  
 $\underline{60,000}$   
 $- 30,000$   
30,000  
 $\begin{array}{r} 11 \\ 4 \ 17 \ 7 \ 1 \ 14 \\ 57,824 \\ - 28,257 \\ \hline 29,567 \end{array}$

Add.

15.  $\begin{array}{r} 111 \\ 7,242 \\ + 6,799 \\ \hline 14,041 \end{array}$     16.  $\begin{array}{r} 111 \\ \$82.56 \\ + \$9.96 \\ \hline \$92.52 \end{array}$     17.  $\begin{array}{r} 1111 \\ 46,285 \\ + 28,967 \\ \hline 75,252 \end{array}$     18.  $\begin{array}{r} 1111 \\ 332,554 \\ + 298,076 \\ \hline 630,630 \end{array}$

19.  $\begin{array}{r} 11 \\ 375 \\ 245 \\ + 357 \\ \hline 977 \end{array}$     20.  $\begin{array}{r} 111 \\ \$20.16 \\ \$36.42 \\ + \$39.87 \\ \hline \$96.45 \end{array}$     21.  $\begin{array}{r} 1111 \\ 53,282 \\ 24,507 \\ 5,648 \\ + 241 \\ \hline 83,678 \end{array}$     22.  $\begin{array}{r} 1111 \\ 20,541 \\ 697,470 \\ + 70,367 \\ \hline 788,378 \end{array}$

Subtract.

23.  $\begin{array}{r} 9 \\ 6 \ 10 \ 3 \ 10 \ 10 \\ 70,400 \\ - 26,338 \\ \hline 44,062 \end{array}$     24.  $\begin{array}{r} 99 \\ 7 \ 10 \ 10 \ 10 \\ 8,000 \\ - 5,248 \\ \hline 2,752 \end{array}$     25.  $\begin{array}{r} 8 \ 10 \ 11 \ 7 \\ \$90.27 \\ - \$8.19 \\ \hline \$82.08 \end{array}$     26.  $\begin{array}{r} 3 \ 15 \ 3 \ 10 \ 3 \ 15 \\ \$454,045 \\ - \$62,707 \\ \hline \$391,338 \end{array}$

Write the fact family equations. *Order of equations may vary.*

27.  $\begin{array}{r} 8 \ 8 \ 16 \\ \hline 8 + 8 = 16 \\ 16 - 8 = 8 \end{array}$     28.  $\begin{array}{r} 6 \ 7 \ 13 \\ \hline 6 + 7 = 13 \\ 7 + 6 = 13 \\ 13 - 7 = 6 \\ 13 - 6 = 7 \end{array}$

Solve and label.

29. One fishing boat caught 31,430 pounds of tuna last month. Another boat caught 52,620 pounds last month. How many pounds did both boats catch last month?

$31,430 + 52,620 = 84,050$  pounds

**Workspace**  
 $\begin{array}{r} 1 \\ 31,430 \\ + 52,620 \\ \hline 84,050 \end{array}$

30. John collected \$97.23 for the cancer fund. Carter collected \$89.97. How much more money did John collect than Carter?

$\$97.23 - \$89.97 = \$7.26$

**Workspace**  
 $\begin{array}{r} 16 \ 11 \\ 8 \ 6 \ 1 \ 13 \\ \$97.23 \\ - \$89.97 \\ \hline \$7.26 \end{array}$



2. Ask similar questions for the remaining numbers.  
*Hundreds, 800; Ten Thousands, 30,000*

**Estimate and solve addition and subtraction problems**

Arrange the class into two teams. Explain that the teams will take turns drawing a problem from the container. The student who selects the problem will estimate and solve the displayed problem while each member of his team solves the problem on paper. Score 10 points for every displayed problem estimated and solved correctly and 5 points for each problem solved correctly by team members.

**Solve word problems**

Trey earned \$12.50 mowing his neighbor's lawn. He then bought a book for \$9.95. How much money does Trey have left?

- ▶ **What is the question asking you to find?** *how much money Trey has left*
- ▶ **What information is given?** *Trey earned \$12.50; he spent \$9.95.*
- ▶ **What operation do you use?** *subtraction*
- ▶ **What is your equation?**  $\$12.50 - \$9.95 = \underline{\quad}$

- Write the equation for display and direct the students to solve it on paper. Remind them to include a dollar sign and decimal point in their answers.
- Choose a student to write his solution and explain how he solved the problem.
  - ▶ **How much money does Trey have left?**  $\$2.55$   
Complete the equation.
  - ▶ **What is the label in this answer?** *dollar sign*
- Repeat the procedure for this word problem.

Trey had \$2.55 after buying the book. The next day, he earned \$7.75 by raking leaves for another neighbor. How much money does Trey have now?  $\$2.55 + \$7.75 = \$10.30$

**Worktext pages 61–62**