The ★BIG Idea

How can I solve problems using numbers through ten thousands?

Make this Foldable to help you organize information about place value. Start with three sheets of 8 1/2” × 11” paper.

Review Vocabulary

cents(¢) centavo(¢) a value of coins less than $1.00

37¢

Key Vocabulary

English Español
place value valor de posición
is greater than (>) es mayor que >
is less than (<) es menor que <
is equal to (=) es igual a (=)
round redondear

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- Self-Check Practice
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When Will I Use This?

Morgan, Kendra and Carlos in Wet Weekend Fun!

Hey, guys! My parents are taking me to a water park this weekend, and I get to choose which one.

Lucky! That will be so fun!

You know, I'm free this weekend if you need some company.

I'll keep that in mind.

I think Wave City is the best water park around!

Well, let's find information about each park on the Internet.

Great idea! We'll see which park is more popular.

Your Turn!

You will solve this problem in the chapter.
Are You Ready for the Chapter?

Text Option  Take the Quick Check below.

**Quick Check**

**Write each number.**

1. 14
   - **Hundreds:** 1
   - **Tens:** 4

2. 33
   - **Hundreds:** 3
   - **Tens:** 3

3. 110
   - **Hundreds:** 1
   - **Tens:** 1
   - **Ones:** 0

4. 1 ten 5 ones
5. 1 hundred 2 ones
6. twenty-four
7. one hundred thirty-eight

**Write the number of tens and ones in each number.**

8. 12
   - **Tens:** 1
   - **Ones:** 2

9. 26
   - **Tens:** 2
   - **Ones:** 6

10. 31
    - **Tens:** 3
    - **Ones:** 1

11. 85
    - **Tens:** 8
    - **Ones:** 5

12. Manuel and his family went to the circus. They spent a total of $65. Tell how many tens and ones are in 65.

**Compare. Use >, <, or =.**

13. 70 61
14. 98 99
15. 155 55

**Round to the nearest ten.**

16. 72
17. 19
18. 59
19. 85

20. Deidra has three game cards each with a value of 10 and two cards each with a value of 1. Raul has three cards each with a value of 1 and two cards each with a value of 10. Whose cards have the lesser value?

**Online Option**  Take the Online Readiness Quiz.
Explore

Main Idea
I will use models to explore place value through thousands.

Materials
base-ten blocks
rubber band

Place Value
A digit is any symbol used to write whole numbers. The numbers 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9 are all digits. The place value of a digit tells what value it has in a number. Base-ten blocks can be used to explore place value.

1 Use base-ten blocks to model 142 in two ways.

One Way: Use hundreds, tens, and ones

Another Way: Use tens and ones

GLE 0306.2.1
Understand the place value of whole numbers to ten-thousands place including expanded notation for all arithmetic operations. Also addresses GLE 0306.1.5, GLE 0306.1.8.
Activity

2. Use base-ten blocks to model 1,025 in two ways.

One Way: Use thousands, hundreds, tens, and ones

```
1 thousand
2 tens
5 ones
```

Another Way: Use hundreds, tens, and ones

```
10 hundreds
2 tens
5 ones
```

Think About It

1. Why can you use different combinations of thousands, hundreds, tens, and ones to model the same number?

Practice and Apply It

Use base-ten blocks to model each number in two ways.

2. 135
3. 304
4. 1,283
5. 1,890

Write each number modeled.

6.

7.

8. WRITE MATH Explain how base-ten blocks are helpful in understanding numbers.
Activity

3 Use base-ten blocks to model 10,000.

Step 1 Show 1,000.
Put 10 hundreds together to form a thousand base-ten block. Wrap with a rubber band.

\[
\begin{align*}
10 \text{ hundreds} & = 1 \text{ thousand} \\
\end{align*}
\]

Step 2 Show 10,000.
Since 1 thousands base-ten block = 1,000

\[
\begin{align*}
10 \text{ thousands base-ten blocks} & = 10,000 \\
\end{align*}
\]

Think About It

9. How many hundreds base-ten blocks would you use to model 10,000?

10. How many tens are in 1,000? 10,000?

11. Describe another way to model 10,000 using base-ten blocks.

12. Write Math What number pattern do you see as you move from the ones place to the ten thousands place of a number?
Main Idea
I will read, write, and identify place value of whole numbers through thousands.

Vocabulary
- digit
- place value
- standard form
- expanded form
- word form

Place Value Through Thousands

The number 1,813 has four \textit{digits}. A digit is any symbol used to write whole numbers. The \textit{place value} of a digit tells what value it has in a number.

A place-value chart can help you understand place value.

\textbf{REAL-WORLD EXAMPLE}

**SYMBOLS** The height of the Statue of Liberty from the top of the base to the top of the torch is 1,813 inches. Identify the place of the underlined digit in 1,813. Then write the value of the digit.

<table>
<thead>
<tr>
<th>Thousands</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>hundreds</td>
<td>tens</td>
</tr>
<tr>
<td>1</td>
<td>8</td>
</tr>
</tbody>
</table>

The underlined digit, 1, is in the thousands place. Its value is 1,000.
**Identify Place Value**

**STATUES** If ten people climb the stairs to the top of the Statue of Liberty and back down, they will have walked 7,080 steps. Identify the place of the underlined digit in 7,080. Then write its value.

The place-value chart shows 7,080.

<table>
<thead>
<tr>
<th>Thousands</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>hundreds</td>
<td>tens</td>
</tr>
<tr>
<td>-----------</td>
<td>------</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>

The underlined digit, 0, is in the hundreds place. Its value is zero. There are no hundreds. When 0 is used in a number, it is sometimes called a place holder.

Numbers can be written in different ways. **Standard form** shows only the digits. **Expanded form** shows the sum of the value of the digits. **Word form** uses words.

**Write Numbers**

**TRAVEL** It is 1,215 miles from Mobile, Alabama, to the Statue of Liberty in New York City. Write 1,215 three ways.

The place-value chart shows 1,215.

<table>
<thead>
<tr>
<th>Thousands</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>hundreds</td>
<td>tens</td>
</tr>
<tr>
<td>-----------</td>
<td>------</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Standard Form:** 1,215

**Expanded Form:** $1,000 + 200 + 10 + 5$

**Word Form:** one thousand, two hundred fifteen
Write the place of the underlined digit. Then write the value of the digit.  

1. \( \underline{8}70 \)  
2. \( 2,\underline{3}12 \)  
3. \( 7,\underline{5}09 \)

Write each number in standard form.  

4. \( 800 + 50 + 6 \)  
5. one thousand, six hundred four

Write each number in expanded form and word form.  

6. 375  
7. 5,230  
8. 9,909

9. Lindsey uses each digit 3, 8, 0, and 1 once. Find the greatest whole number she can make.

10. **TALK MATH** How do you tell the place value of each digit when given a number?

---

Write the place of the underlined digit. Then write the value of the digit.  

11. \( \underline{5}01 \)  
12. \( 5,\underline{7}72 \)  
13. \( 1,\underline{0}20 \)

14. \( 4,\underline{8}10 \)  
15. \( 3,\underline{1}76 \)  
16. \( 8\underline{0}4 \)

Write each number in standard form.  

17. \( 4,000 + 600 + 70 + 8 \)  
18. \( 3,000 + 20 + 1 \)

19. seven thousand, six hundred forty-one

20. eight thousand, seven hundred sixty

Write each number in expanded form and word form.  

21. 4,332  
22. 1,324  
23. 6,219

24. 6,503  
25. 8,150  
26. 1,001

27. A motorcycle costs $3,124. What is the value of each digit?  
28. Write all of the three-digit numbers that have 3 in the tens place and 5 in the ones place.
### Test Practice

**32.** The model represents the number of days the South Pole does not have sun each year.

Choose the standard form of this number. *(Lesson 1B)*

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. 1,802</td>
<td>C. 281</td>
</tr>
<tr>
<td>B. 1,082</td>
<td>D. 182</td>
</tr>
</tbody>
</table>

**33.** Martin earned 7,283 points while playing a video game. Choose the correct word form of this number. *(Lesson 1B)*

- F. seven thousand, eight hundred twenty-three
- G. seven thousand, two hundred eighty-three
- H. seven thousand, two hundred thirty-eight
- I. \(7,000 + 200 + 80 + 3\)

**34.** Marcus has 1,270 baseball cards. What is the value of the digit 2? *(Lesson 1B)*

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. 2</td>
<td>C. 200</td>
</tr>
<tr>
<td>B. 20</td>
<td>D. 2,000</td>
</tr>
</tbody>
</table>

**35.** Most people have more than 14 hundred dreams a year. What number is 14 hundreds? *(Lesson 1A)*

- F. 140
- G. 1,040
- H. 1,400
- I. 14,000
Identity Place Value

Place Value Through Ten Thousands

A place-value chart can be used to help read large numbers. A group of 3 digits is called a period. Commas separate the periods. When reading a number, say the name of the period at each comma.

Vocabulary
period

TRAVEL There are 14,858 airports in the United States. This is more than any other country. Identify the place of the underlined digit in 14,858. Then write its value.

The place-value chart shows 14,858.

<table>
<thead>
<tr>
<th>Thousands</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>hundreds</td>
<td>tens</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

The underlined digit, 1, is in the ten thousands place. So, its value is 10,000.

Write 14,858 in three ways.

Standard Form: 14,858

Expanded Form: 10,000 + 4,000 + 800 + 50 + 8

Word Form: fourteen thousand, eight hundred fifty-eight
Lesson 1C Identify Place Value

Write the place of the underlined digit. Then write its value. See Example 1

1. \(49,62\) 2. \(26,021\) 3. \(54,610\) 4. \(62,543\)

Write each number in standard form. See Example 2

5. \(30,000 + 3,000 + 300 + 3\)
6. twenty thousand, four hundred ten

Write each number in expanded form and word form. See Examples 2–4

7. \(14,751\)
8. \(99,001\)
9. \(25,252\)
10. \(80,911\)

11. Sasha collected ten thousand, one hundred thirty-two digital photos. Write this number in standard form and expanded form.

12. TALK MATH Explain why the number 46,012 is not the same as 40,000 + 6,000 + 100 + 2.
Write the place of each underlined digit. Then write its value. See Example 1

13. 15,388  
14. 19,756  
15. 30,654  
16. 43,543  
17. 57,081  
18. 69,003  
19. 70,000  
20. 86,060

Write each number in standard form. See Example 2

21. 20,000 + 4,000 + 200 + 20 + 2  
22. 10,000 + 1,000 + 100 + 10 + 1  
23. forty thousand, three hundred eighty  
24. thirty-two thousand, twenty-five

Write each number in expanded form and word form. See Examples 2–4

25. 12,194  
26. 28,451  
27. 39,234  
28. 51,160  
29. 60,371  
30. 73,100  
31. 81,001  
32. 99,027

The table lists the location and altitude of the world’s largest telescopes.

33. Which altitudes have a digit in the ten thousands place?

34. Write the altitude of the Palomar Mountain observatory in word form.

35. Which observatory’s altitude has a digit with a value of 700?

36. **OPEN ENDED** Write three different numbers that have 5 in the thousands place.

37. **WRITE MATH** Explain the difference between standard form and expanded form.
A place-value chart can help you read and write numbers in the hundred thousands.

**Identify the Value of Digits**

**SPACE** The distance from earth to the moon is 238,900 miles.

Write the value of the underlined digit in 238,900.

<table>
<thead>
<tr>
<th>Thousands</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>hundreds</td>
<td>tens</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The underlined digit has a value of 200,000. This is because the 2 is in the hundred thousands place.

Remember, you can write a number three different ways.

**Read and Write Numbers**

2. Write 238,900 three different ways.

- **Standard Form:** 238,900
- **Expanded Form:** 200,000 + 30,000 + 8,000 + 900
- **Word Form:** two hundred thirty-eight thousand, nine hundred

Write the place of the underlined digit. Then write the value of the digit.

38. 412,604
39. 815,084
40. 956,497

Write each number in standard form.

41. 700,000 + 50,000 + 2,000 + 10 + 1
42. 60,000 + 800 + 40 + 5

Write each number in expanded form and word form.

43. 243,895
44. 485,830
45. 649,320
46. 784,132
47. 505,050
48. 891,074

*To assess mastery of SPI 0306.2.1, SPI 0306.2.2, and SPI 0306.2.3, see your Tennessee Assessment Book.*
Problem-Solving Skill: Four-Step Plan

Main Idea I will use the four-step plan to solve problems.

Dina’s family went to a zoo. They learned that a roadrunner is 1 foot tall. An African elephant is 12 feet tall. How much taller is an African elephant than a roadrunner?

Understand What facts do you know?
- The roadrunner is 1 foot tall.
- The African elephant is 12 feet tall.

What do you need to find?
- You need to find how much taller an African elephant is than a roadrunner.

Plan To find out how much taller an African elephant is than a roadrunner, subtract.

Solve
\[
\begin{align*}
12 & \quad \text{height of elephant} \\
- & \quad \text{height of roadrunner} \\
11 & \quad \text{So, the elephant is 11 feet taller than the roadrunner.}
\end{align*}
\]

Check Since addition and subtraction are inverse operations, you can use addition to check the subtraction.

\[
\begin{align*}
12 & \quad 11 \\
- & \quad + \\
11 & \quad 12 \\
\end{align*}
\]

So, the answer is correct.

GLE 0306.1.2 Apply and adapt a variety of appropriate strategies to problem solving, including estimation, and reasonableness of the solution.
Refer to the problem on the previous page.

1. Explain why you subtract 1 from 12 to find how much taller an elephant is than a roadrunner.

2. Suppose an elephant is 8 feet tall. How much shorter is a roadrunner?

3. Suppose a roadrunner is 3 feet tall. How much taller would an elephant be than the roadrunner?

4. Look back at Exercise 3. Check your answer. How do you know that it is correct? Explain.

Solve. Use the four-step plan.

5. Cameron and Mara walked 2 blocks. Then they turned a corner and walked 4 blocks. How many blocks do they need to walk to return to their starting place?

6. Choose four of the game tiles, without adding tiles together of the same place value, to make the greatest 5-digit number possible.

7. Cortez bought a loaf of wheat, a loaf of rye, and a loaf of white bread. Gloria bought a loaf of raisin, a loaf of cinnamon, and a loaf of rye bread. How many different loaves of bread did they buy?

8. Follow the directions to find the correct height of the CN Tower in Toronto, Canada. Start with 781 feet. Add 1 hundred. Add 1 thousand. Subtract 7 tens and add 4 ones.

9. Marjorie modeled a 4-digit number. She modeled 1 thousand, 5 hundreds, 3 ones, and 2 tens. Write Marjorie’s number in standard form and expanded form.

10. In 1,000 years from now, what year will it be? What year will it be 100 years from now? 10 years from now?

11. WRITE MATH Explain how the four-step plan helps you solve a problem.
Main Idea
I will compare numbers through ten thousands.

Vocabulary
- is less than (<)
- is greater than (>)
- is equal to (=)

Compare Numbers
When comparing two numbers, the first number is either less than, greater than, or equal to the second number.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;</td>
<td>is less than</td>
</tr>
<tr>
<td>&gt;</td>
<td>is greater than</td>
</tr>
<tr>
<td>=</td>
<td>is equal to</td>
</tr>
</tbody>
</table>

Use a Number Line

### MEASUREMENT
The Tyee family is planning a road trip to the Grand Canyon. One route is about 840 miles. A second route is about 835 miles. Which route is shorter?

You can use a number line to compare 835 and 840.

835 is to the left of 840
835 is less than 840
835 < 840

840 is to the right of 835
840 is greater than 835
840 > 835

So, the second route is shorter.
TIME Which is greater, 19,870 days or 1,400 days?

You need to compare 19,870 and 1,400. Line up the numbers. Then compare.

<table>
<thead>
<tr>
<th>Thousands</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>19,870</td>
<td>0</td>
</tr>
<tr>
<td>1,400</td>
<td>0</td>
</tr>
</tbody>
</table>

1 ten thousand is greater than 0 ten thousands. So, 19,870 > 1,400.

HOCKEY During his hockey career, Mark Messier scored 1,887 points. Gordie Howe scored 1,850 points during his career. Who scored fewer points during their career?

Compare 1,887 and 1,850 to see who scored fewer points.

Step 1 Line up the numbers by place value.

<table>
<thead>
<tr>
<th>Thousands</th>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>1</td>
<td>8</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

Step 2 Compare. Start with the greatest place-value position.

<table>
<thead>
<tr>
<th>Thousands</th>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>1</td>
<td>8</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

Since 5 is less than 8, 1,850 < 1,887. So, Gordie Howe scored fewer points.
**CHECK What You Know**

Compare. Use $>$, $<$, or $=$. See Examples 1–3

1. $604$ $\text{and}$ $592$
2. $188$ $\text{and}$ $198$
3. $1,000$ $\text{and}$ $850$
4. $2,644$ $\text{and}$ $2,464$
5. $1,000$ $\text{and}$ $1,000$
6. $32,345$ $\text{and}$ $32,357$

7. The Flips Gymnastics Club has 131 members. The Tumblers have 113 members. Which club has more members? Explain.

8. **TALK MATH** Why is it not necessary to compare the ones digits in the numbers 4,365 and 4,378?

**Practice and Problem Solving**

Compare. Use $>$, $<$, or $=$. See Examples 1–3

9. $555$ $\text{and}$ $725$
10. $999$ $\text{and}$ $999$
11. $700$ $\text{and}$ $800$
12. $931$ $\text{and}$ $8,310$
13. $1,121$ $\text{and}$ $1,112$
14. $6,573$ $\text{and}$ $7,650$
15. $3,039$ $\text{and}$ $33,019$
16. $998$ $\text{and}$ $989$
17. $8,008$ $\text{and}$ $8,080$
18. $32,753$ $\text{and}$ $2,735$
19. $7,654$ $\text{and}$ $7,654$
20. $19,999$ $\text{and}$ $11,000$

**Algebra** Compare. Use $>$, $<$, or $=$.

21. $65$ $\text{and}$ $62 + 3$
22. $335 + 4$ $\text{and}$ $339$
23. $2,209$ $\text{and}$ $2,200 + 90$

24. The table shows the number of tickets sold for a movie. Which showing sold more tickets?

<table>
<thead>
<tr>
<th>Showing</th>
<th>Tickets Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>5:00 P.M.</td>
<td>235</td>
</tr>
<tr>
<td>7:00 P.M.</td>
<td>253</td>
</tr>
</tbody>
</table>

25. **Measurement** Which day was warmer in the desert, Tuesday or Wednesday? Explain.

<table>
<thead>
<tr>
<th>Desert Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Day</strong></td>
</tr>
<tr>
<td>Tuesday</td>
</tr>
<tr>
<td>Wednesday</td>
</tr>
</tbody>
</table>

26. There are 165 students in the third grade. There are 35 students in each of the five classes in the second grade. Which grade has more students? Explain.

27. Keith’s family bought a computer for $1,200. Margareta’s family bought a computer for $1,002. Which computer cost less? Explain.
28. Which water park is Morgan going to visit this weekend? Explain.

29. OPEN-ENDED Write the greatest and least 4-digit number you can make using the numerals 3, 6, 7, and 9 one time.

30. WHICH ONE DOESN'T BELONG? Identify the number that is less than 4,259.

   4,295   4,260   4,300   4,209

31. WRITE MATH Explain the first step in comparing 2,032 and 203. Which number is greater? Explain.

32. Which number will make the number sentence true? (Lesson 2B)

   1,426 > ■

   A. 1,425   C. 1,452
   B. 1,426   D. 1,524

33. Mrs. Phillips’ class is having a pizza party. There are 30 students. Each pizza is cut into 10 pieces. If each student gets one piece, how many pizzas are there? (Lesson 2A)

   F. 3   H. 7
   G. 5   I. 10
Main Idea
I will use a number line and place value to order numbers through ten thousands.

### Order Numbers
Comparing numbers can help you to order numbers.

#### Order Least to Greatest

**MEASUREMENT**
The table shows the length of three whales. Order the lengths from least to greatest.

**Average Length of Whales**

<table>
<thead>
<tr>
<th>Whale</th>
<th>Length (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orca Whale</td>
<td>264</td>
</tr>
<tr>
<td>Blue Whale</td>
<td>1,128</td>
</tr>
<tr>
<td>Humpback Whale</td>
<td>744</td>
</tr>
</tbody>
</table>

**One Way:** Use a Number Line

- 264
- 744
- 1,128

264 < 744 < 1,128

**Another Way:** Use a Place-Value Chart

<table>
<thead>
<tr>
<th>Thousands</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 thousand is the greatest number.

7 hundreds > 2 hundreds

The order is 264 inches, 744 inches, and 1,128 inches.
Order Greatest to Least

**MEASUREMENT** The table shows the distances whales travel to feed in the summertime. This is called migration. Order these distances from greatest to least.

Use the place value chart to line up the numbers by their place value. Compare from the left.

The order is 12,000 miles, 3,500 miles, and 900 miles.

<table>
<thead>
<tr>
<th>Whale Migration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whale</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>Humpback Whale</td>
</tr>
<tr>
<td>Gray Whale</td>
</tr>
<tr>
<td>Orca Whale</td>
</tr>
</tbody>
</table>

**Order the numbers from least to greatest.** See Example 1

1. 39; 32; 68  
2. 224; 124; 441  
3. 202; 2,202; 220

**Order the numbers from greatest to least.** See Example 2

4. 231; 136; 178  
5. 1,500; 150; 15  
6. 99,009; 9,909; 69,999

7. Team A won 19 games, Team B won 40 games, and Team C won 22 games during the season. What place did each team earn for the season?

8. **TALK MATH** Order these numbers from greatest to least: 435; 345; and 3,453. Explain how you can tell which number is greatest.
Order the numbers from least to greatest.  See Example 1

9. 303; 30; 3,003
10. 4,404; 4,044; 4,040
11. 39; 78; 123
12. 1,234; 998; 2,134
13. 598; 521; 3,789
14. 22,673; 22,787; 22,900

Order the numbers from greatest to least.  See Example 2

15. 60; 600; 6,006
16. 288; 209; 2,899
17. 349; 343; 560
18. 3,587; 875; 2,435
19. 451; 409; 415
20. 999; 81,342; 72,000

21. Carra’s dad is shopping for a car. Which car costs the most?

22. Kurt wants to buy a parrot, pony, or dog. Order the animals from the least to the most expensive.

23. Three elementary schools have 2,500 students, 3,002 students, and 2,536 students. Which is the least number of students?

24. In a set of numbers, 59 is the least number and 10,000 is the greatest. Write four ordered numbers that could be between these numbers.

25. NUMBER SENSE Suppose you are ordering the numbers 1,467; 1,980; and 1,745 from greatest to least. Between which two numbers will 1,567 be placed?

26. WRITE MATH Write a real-world problem in which you need to order numbers from least to greatest.
Write the place of each underlined digit. Then write the value of the digit. (Lesson 1B)

1. 549
2. 3,520

3. **MULTIPLE CHOICE** How is five thousand, three hundred nineteen written in standard form? (Lesson 1B)
   - A. 5,193
   - B. 5,309
   - C. 5,319
   - D. 5,391

4. **Measurement** A hippopotamus at a zoo weighs 3,525 pounds. Write this number in expanded and word form. (Lesson 1B)

Write the place of each underlined digit. Then write the value of the digit. (Lesson 1C)

5. 16,846
6. 28,950

Write each number in expanded form. (Lesson 1C)

10. Jennifer hopes to read 10,240 pages this summer.

11. Forty-five thousand, sixty-seven people attended the concert.

Compare. Use <, >, or =. (Lesson 2B)

12. 80,000 < 8,008
13. 9,638 < 10,721

Order the numbers from greatest to least. (Lesson 2C)

14. 278; 476; 285
15. 9,009; 909; 6,999
16. 58,431; 42,646; 58,430
17. **MULTIPLE CHOICE** Hong has saved $37. He spends $19 on clothes. He earns $15 for mowing the neighbor’s yard. How much money does Hong have now? (Lesson 2A)
   - F. $3
   - G. $33
   - H. $34
   - I. $71

18. **WRITE MATH** Explain how the value of the 5 changes in 4,756 if it is moved to the thousands place. (Lesson 1B)
The Mississippi River is part of the largest river system in North America. The river begins in Minnesota and empties into the Gulf of Mexico. The Mississippi River system extends from the Rocky Mountains in the western United States to the Appalachian Mountains in the east.

The Mississippi River is about 2,340 miles long. The shallowest point is 3 feet. The deepest point is 198 feet. It’s no wonder that the Mississippi River is called the “Mighty Mississippi.”

<table>
<thead>
<tr>
<th>River</th>
<th>Length (miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>1,469</td>
</tr>
<tr>
<td>Mississippi</td>
<td>2,340</td>
</tr>
<tr>
<td>Missouri</td>
<td>2,540</td>
</tr>
<tr>
<td>Ohio</td>
<td>1,310</td>
</tr>
<tr>
<td>Red</td>
<td>1,290</td>
</tr>
</tbody>
</table>
The Mississippi River begins 1,475 feet above sea level.

Use the information on the previous page to solve each problem.

1. Which river is the longest?
2. Which river lengths have the same value for the hundreds place? What is that value?
3. Write the length of the Arkansas River in expanded form.
4. The total of the lengths of the Missouri River and Mississippi River is 4,880 miles. How is this number written in words?
5. How does the length of the Red River compare to the lengths of the other 4 rivers? Use >, <, or = for each comparison.
6. Which is the third longest river?
7. Which river has the length of $2,000 + 300 + 40$ miles? What is its length in standard form?
8. Write the length of the Ohio River in word form.
9. What is the difference in the depths of the Mississippi from its shallowest point to its deepest point?
10. The Amazon River in South America is 3,920 miles long. Which river is longer, the Amazon or the Missouri?
Main Idea
I will round numbers to the nearest ten and hundred.

Vocabulary
round

REAL-WORLD EXAMPLES

**TECHNOLOGY** Cassandra used 62 minutes on her family’s cell phone plan. About how many minutes did Cassandra use? Round to the nearest ten.

The closest ten *less than* 62 is 60. The closest ten *greater than* 62 is 70. Use a number line from 60 to 70.

62 is closer to 60 than to 70. So, Cassandra used about 60 minutes.

**TECHNOLOGY** Cassandra’s brother, Matao, used 186 minutes. About how many minutes did he use? Round to the nearest ten.

The closest ten *less than* 186 is 180. The closest ten *greater than* 186 is 190. Use a number line from 180 to 190.

186 is closer to 190 than to 180. Matao used about 190 minutes.
You can also round numbers to the nearest hundred.

### REAL-WORLD EXAMPLES

#### BOOKS
Bruno read a book that was 267 pages long. To the nearest hundred, how many pages did he read?

![Number line showing 267 rounded to 300]

267 is closer to 300 than to 200. Bruno read about 300 pages.

#### SHELLS
Olivia collected shells. To the nearest hundred, how many seashells did she collect?

![Number line showing 1,423 rounded to 1,400]

1,423 is closer to 1,400 than to 1,500. Olivia collected about 1,400 shells.

### CHECK What You Know

**Round to the nearest ten.** See Examples 1 and 2

1. 58
2. 62
3. 685
4. 552

**Round to the nearest hundred.** See Examples 3 and 4

5. 449
6. 473
7. 415
8. 1,450

9. Kayla has to read 67 pages for homework tonight. To the nearest ten, how many pages does she need to read?

10. **TALK MATH** What should you do to round a number that is halfway between two numbers?
Round to the nearest ten.  See Examples 1 and 2

11. 77  
12. 67  
13. 13  
14. 21  
15. 285  
16. 195  
17. 157  
18. 679  

Round to the nearest hundred.  See Examples 3 and 4

19. 123  
20. 244  
21. 749  
22. 750  
23. 353  
24. 850  
25. 1,568  
26. 4,829  

27. Myron has 179 baseball cards. He says he has about 200 cards. Did he round the number of cards to the nearest ten or hundred? Explain.

28. Measurement  A passenger train traveled 1,687 miles. To the nearest hundred, how many miles did the train travel?

29. Coco collected 528 cans of food for a food drive. If she collects 25 more cans, what is the total number of cans collected, rounded to the nearest hundred?

30. Mrs. Boggs ran for mayor. She received 1,486 votes. Mrs. Swain received 1,252 votes. What is the difference in the number of votes to the nearest ten?

Sports  Danilo is practicing bowling. The table shows his scores for one week.

31. Round all scores to the nearest hundred. Which days were the scores about 300?

32. To the nearest ten, what was the score on Tuesday?

33. To the nearest ten, which day’s score rounds to 250?

34. OPEN ENDED  I am thinking of a number that when rounded to the nearest hundred is 400. What is the number? Explain.

35. WRITE MATH  Explain why 238 can be rounded to 240 or 200.
Get Ready!
Players: 2 players

Get Set!
Each player draws the game board.

Go!
☆ Each player secretly writes a 4-digit number on a piece of paper.
☆ In the center of the game board, each player writes their 4-digit number rounded to the nearest hundred.
☆ Player 1 guesses 1 digit that he or she thinks is in the other player’s secret number.
☆ If the digit is correct, Player 2 writes it on the correct line. If it is incorrect, Player 2 fills in one space.
☆ Player 2 takes his or her turn guessing Player 1’s secret number.
☆ Play continues until the number is guessed or all spaces are filled in.

You will need: pencil and paper
Main Idea
I will round numbers to the nearest thousand.

GLE 0306.1.2 Apply and adapt a variety of appropriate strategies to problem solving, including estimation, and reasonableness of the solution. Also addresses SPI 0306.2.2.

Round to the Nearest Thousand

Numbers can also be rounded to the nearest thousand.

**VISITORS** Mr. Chou’s Arcade keeps a record of the number of visitors it has each week. About how many visitors went to the arcade in week 3? Round this number to the nearest thousand.

1. About how many visitors went to the arcade in week 3? Round this number to the nearest thousand.

   4,684 is closer to 5,000 than to 4,000. About 5,000 people visited the arcade in week 3.

2. About how many visitors went to the arcade in week 2? Round to the nearest thousand.

   The closest thousand less than 2,341 is 2,000. The closest thousand greater than 2,341 is 3,000.

   2,341 is closer to 2,000 than to 3,000. About 2,000 people visited the arcade in week 2.
You can use rounding rules to round a number.

**Key Concept**

**Rounding Whole Numbers**

**Step 1** Underline the digit to be rounded.

**Step 2** Look at the digit to the right of the place being rounded.

**Step 3** If the digit is 4 or less, do not change the underlined digit. If the digit is 5 or greater, add 1 to the underlined digit.

**Step 4** Replace all digits after the underlined digit with zeros.

---

**REAL-WORLD EXAMPLE**

**ZOO** A zoo has a membership of 47,499 families. To the nearest thousand, about how many families are members?

**Step 1** Underline the digit in the place to be rounded. In this case, the 7 is in the thousands place. 47,499

**Step 2** Look at the 4, the digit to the right of the underlined digit. 47,499

**Step 3** This digit is less than 5, so do not change the underlined digit. 47,499

**Step 4** Replace all digits after the underlined digit with zeros. 47,000

**Check** To the nearest thousand, 47,499 rounds to 47,000. ✓

So, there are about 47,000 families who are members of the zoo.
Round to the nearest thousand.  See Examples 1–3

1. 3,922  
2. 2,798  
3. 7,099  
4. 1,499  
5. 12,500  
6. 43,601  
7. There are 1,250 houses in a city. Round the number of houses to the nearest thousand.

8. **TALK MATH** Explain how you would use the rounding rules to round 5,299 to the nearest thousand.

Round to the nearest thousand.  See Examples 1–3

9. 8,611  
10. 3,651  
11. 1,099  
12. 4,243  
13. 2,698  
14. 1,503  
15. 1,257  
16. 5,598  
17. 5,299  
18. 51,500  
19. 62,400  
20. 33,789  

21. The fourth-grade class read a total of 12,389 pages this month. Round the number of pages to the nearest thousand.

22. The attendance at a recent high school football game was 1,989. What is the attendance rounded to the nearest thousand?

23. To the nearest thousand, what will the cost be for the third grade to take a trip to the zoo?

24. Irene’s scores on her favorite video game got better each day. What is her score on Wednesday rounded to the nearest thousand?

<table>
<thead>
<tr>
<th>Video Game Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Day</strong></td>
</tr>
<tr>
<td>Monday</td>
</tr>
<tr>
<td>Tuesday</td>
</tr>
<tr>
<td>Wednesday</td>
</tr>
</tbody>
</table>

25. Alton and his friends collected 1,683 stickers. How many stickers is this rounded to the nearest thousand?

26. **Measurement** Chong rode a train 2,156 miles one way. To the nearest thousand, what is the total number of miles he rode the train both ways?
27. **NUMBER SENSE** Describe all the four-digit numbers that when rounded to the nearest thousand are 8,000.

28. **WHICH ONE DOESN’T BELONG?** Identify the number that is not rounded correctly to the nearest thousand. Explain.

   - 2,184 → 2,000
   - 5,500 → 5,000
   - 3,344 → 3,000
   - 8,456 → 8,000

29. **WRITE MATH** Round 499 to the nearest hundred. Then round 499 to the nearest ten. Are the two answers the same? Explain.

30. Which number is 549 rounded to the nearest ten? (**Lesson 3A**)  
   A. 500  
   B. 600  

31. Margo rounded the number of beads in her craft set to 4,000. Which number could be the exact number of beads? (**Lesson 3B**)  
   F. 2,989  
   H. 4,576  
   G. 3,576  
   I. 5,004

32. Round 499 to the nearest hundred. Then round 499 to the nearest ten. Are the two answers the same? Explain.

33. **Spiral Review**

   **Round to the nearest ten.** (**Lesson 3A**)  
   32. 89  
   33. 319  
   34. 5,568  
   35. 8,728

   **Order the numbers from greatest to least.** (**Lesson 2C**)  
   36. 1,234; 998; 2,134  
   37. 598; 521; 3,789  
   38. 12,673; 12,787; 12,900

   39. Elias purchased the following items. He also bought a book about sports for $8. How much did he spend in all? (**Lesson 2A**)
Problem-Solving Investigation

Main Idea I will use the four-step plan to solve a problem.

**TWYLA:** Building Set A has 1,025 pieces, with 24 bonus parts. Set B has 995 pieces and 75 bonus parts. I want to buy the set with more pieces and parts.

**YOUR MISSION:** Find which set has the greater total.

**Understand**
There 1,025 pieces and 24 bonus parts in Set A. Set B has 995 pieces and 75 bonus parts. Find the greater total.

**Plan**
You do not need an exact number. So, you can round to estimate the total.

**Solve**
Round the numbers in each set to the nearest ten. Then add.

<table>
<thead>
<tr>
<th>Set A</th>
<th>Set B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,025</td>
<td>995</td>
</tr>
<tr>
<td>+ 24</td>
<td>+ 75</td>
</tr>
<tr>
<td>1,050</td>
<td>1,080</td>
</tr>
</tbody>
</table>

Set A has about 1,050 pieces. Set B has about 1,080 pieces. 1,050 < 1,080 So, Set B has the greater number of pieces.

**Check**
Use a number line to check your work.

Less than
So, the answer is correct.

**GLE 0306.1.2** Apply and adapt a variety of appropriate strategies to problem solving, including estimation, and reasonableness of the solution.
Use the four-step plan to solve each problem.

1. **Measurement** Juan exercised 20 minutes yesterday. Today he is going to exercise twice as long. How long does Juan plan to exercise today? Explain.

2. **Algebra** What is the next figure in the pattern?

   ![Pattern Image](image)

3. **Sylvia’s cards**

   ![Sylvia’s cards Image](image)

   **Meli’s cards**

   ![Meli’s cards Image](image)

   How many points do Sylvia and Meli have? Who has the greater number of points? Use < or >.

4. Gabriela buys the following items. She gives the cashier $20. How much change will she receive?

5. **Measurement** Joshua gets up at 8:30 A.M. He needs to leave for school by 9:00 A.M. How many minutes does he have to get ready?

6. The table shows the number of play tickets four friends sold on Saturday.

<table>
<thead>
<tr>
<th>Name</th>
<th>Tickets Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Louise</td>
<td>10 + 7</td>
</tr>
<tr>
<td>Malcolm</td>
<td>fourteen</td>
</tr>
<tr>
<td>Bobby</td>
<td>20 – 5</td>
</tr>
<tr>
<td>Shelly</td>
<td>19 + 2</td>
</tr>
</tbody>
</table>

   Write the number of tickets sold in standard form. Then order the numbers from greatest to least.

7. Look at the table. How many pens do Cesar and Pamela have in all? How many more pens does Carmen have than Pamela?

<table>
<thead>
<tr>
<th>Name</th>
<th>Pens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pamela</td>
<td>7</td>
</tr>
<tr>
<td>Cesar</td>
<td>9</td>
</tr>
<tr>
<td>Carmen</td>
<td>20</td>
</tr>
</tbody>
</table>

8. Mrs. Reinhart read her students one book each day for 2 weeks. There are 5 days in each school week. How many books did she read in all? Explain your reasoning.

9. **WRITE MATH** Explain how the plan step is different than the solve step in the four-step plan.
Main Idea
I will find the value of coins and bills.

Vocabulary
bill
dollar

GLE 0306.1.8 Use technologies/manipulatives appropriately to develop understanding of mathematical algorithms, to facilitate problem solving, and to create accurate and reliable models of mathematical concepts. Also addresses SPI 0306.1.8, SPI 0306.2.4.

Value of Coins and Bills
In the United States, money includes coins and bills.

**Main Idea**
I will find the value of coins and bills.

**Vocabulary**
- bill
- dollar

**REAL-WORLD EXAMPLE**
**Find the Value of Coins**

1. **MONEY** Allison used the coins shown to buy a salad. How much money did Allison spend on her salad?

**Key Concept**

<table>
<thead>
<tr>
<th>Value of Coins</th>
<th>1¢ or $0.01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Penny</td>
<td>1¢ or $0.01</td>
</tr>
<tr>
<td>Nickel</td>
<td>5¢ or $0.05</td>
</tr>
<tr>
<td>Dime</td>
<td>10¢ or $0.10</td>
</tr>
<tr>
<td>Quarter</td>
<td>25¢ or $0.25</td>
</tr>
<tr>
<td>Half-Dollar</td>
<td>50¢ or $0.50</td>
</tr>
</tbody>
</table>

Allison used 2 quarters, 1 dime, 1 nickel, and 5 pennies. Add the value of the coins. Start with the greatest value.

\[
25 + 25 + 10 + 5 + 1 + 1 + 1 + 1 + 1 = 70¢
\]

So, Allison spent 70 cents, 70¢, or $0.70.
You can also use the dollar sign ($) to write amounts of money.

one dollar ↔ 100¢ ↔ 100 cents ↔ $1.00

**REAL-WORLD EXAMPLE**

**MONEY What is the value of the coins shown?**

There are 4 nickels, 2 quarters, 2 pennies, and 4 dimes.

First, put the coins in order from greatest to least in value. Use skip counting to add the values of each coin.

$0.25 \quad $0.50 \quad $0.60 \quad $0.70 \quad $0.90 \quad $0.95 \quad $1.00 \quad $1.05 \quad $1.10 \quad $1.11 \quad $1.12

So, the value of the coins shown is $1.12.

**Remember**

Group the coins in order from greatest to least value before you count the money.

Another name for paper money is **bill**. The unit is dollar ($).

**REAL-WORLD EXAMPLE**

**MONEY What is the value of the money shown?**

$1.00 + $0.25 + $0.25 + $0.10 + $0.05 + $0.05 + $0.01 = $1.71

The value of the money shown is 1 dollar and 71 cents or $1.71.
Find the value of the coins.  See Examples 1 and 2

1.  

2.  

Find the value of the bills and coins.  See Example 3

3.  

4.  

5. Monique has 95¢. Which coins could she have?

6.  

TALK MATH Is there more than one way to make 4¢? Explain.

Practice and Problem Solving

Find the value of the coins.  See Examples 1 and 2

7.  

8.  

9.  

Find the value of the bills and coins.  See Example 3

10.  

11.  

12.  

13.  

14. Garrett has one $1-bill, 5 quarters, and 3 dimes. Does he have enough money to buy a yo-yo for $2.45? Explain.

15. Todd has 3 nickels and 2 dimes. Will he have enough money to buy a snack for $0.25? Explain.

16. Which coins could be used to make $2.00?

17. Tara has 7 coins that equal $1.25. Which coins does she have?
18. **OPEN ENDED** Describe three different combinations of coins and bills that add up to the same amount of money.

19. **CHALLENGE** What is the least number of coins needed to make 99¢? Which coins are used?

20. **WRITE MATH** Explain why a person might trade a dollar bill for four quarters.

### Test Practice

21. What is the value of the coins? **(Lesson 4A)**

- **A.** $0.164
- **B.** $0.86
- **C.** $1.16
- **D.** $1.21

22. What numeral means the same as $30,000 + 4,000 + 200 + 8$? **(Lesson 1C)**

- **F.** 30,208
- **G.** 30,280
- **H.** 34,208
- **I.** 34,280

### Spiral Review

**Round to the nearest ten.** **(Lesson 3A)**

23. 48  
24. 82  
25. 692

**Order the numbers from greatest to least.** **(Lesson 2C)**

26. 902; 962; 692  
27. 444; 333; 555  
28. 41,645; 41,564; 41,465

**Write each number in word, standard, and expanded form.** **(Lesson 1C)**

29. thirty two thousand, six hundred one

30. $80,000 + 1,000 + 600 + 50 + 4$

31. thirty two thousand, six hundred one

32. Ricardo said the word form of 6,287 is sixty thousand, two hundred eighty-seven. Is he correct? Explain. **(Lesson 1B)**

*To assess mastery of SPI 0306.2.4, see your Tennessee Assessment Book.*
Determine Change

You can use coins and bills to make change.

Main Idea
I will determine change.

SPI 0306.1.3
Determine the correct change from a transaction less than a dollar. Also addresses GLE 0306.1.7.

MONEY Michael and his father are shopping at a toy store. The table shows the cost of toys in a box. Michael buys a yo-yo. He gives the cashier a five-dollar bill. How much change should Michael receive?

Step 1  Count up to determine the change.

Start at $0.77 → $0.78 → $0.79 → $0.80 → $0.90 → $1.00
(cost of yo-yo)

→ $2.00 → $3.00 → $4.00 → $5.00
(amount paid)

Step 2  Count the change back.

Start at $1.00 → $2.00 → $3.00 → $4.00
(greatest value)
→ $4.10 → $4.20 → $4.21 → $4.22 → $4.23
(change received)

So, Michael will receive $4.23 in change.
MONEY Janet buys a stuffed animal for $3.45. She pays with a $5-bill. How much change should she receive?

Count up to find the change.

Step 1  Count the cents.

Start at $3.45 and go to the next whole dollar, $4.00. $3.45 to $4 is 55 cents.

Step 2  Count the dollars.

Start at $4 and count to $5. $4 to $5 is 1 dollar.

So, Janet should receive $1.55 in change.

CHECK What You Know

A $5-bill was used to buy each item. Determine the change. Use coins and bills if needed. See Examples 1 and 2

1. 

2. 

3. 

Solve. Write the amount of change that should be received.

4. Keisha buys a yo-yo for 89¢. She pays with 4 quarters.

5. Jorge buys a sandwich for $4.49. He pays with a $5-bill.

6. TALK MATH A notebook costs $3.72. Explain how to determine the change if you pay with a $5-bill.
A $5-bill was used to buy each item. Determine the change. Use coins and bills if needed.  
See Examples 1 and 2

10. Sam buys a video for $4.28. He pays with a $5-bill.
11. Kara buys a sticker for $0.78. She pays with a $1-bill.
12. Kendra buys a ring for $1.29. She pays with a $5-bill.
13. Nick buys a baseball for $2.89. He pays with a $5-bill.
14. Lexie buys a new bone for her dog for $3.65. She pays with a $5-bill.

Solve. Write the amount of change that should be received.

16. **NUMBER SENSE** Sally received $2.23 in change when she bought a birthday card. If she paid with a $5-bill, how much did the birthday card cost? Explain.

17. **FIND THE ERROR** Eva determined the amount of change she should receive if she buys a pack of baseball cards for $4.38 with a $5-bill. Find and correct her mistake.

18. **WRITE MATH** Sidney bought a box of crayons for $3.83. She paid with a $5-bill. Explain two different ways she can receive her change.
You can compare sets of money by counting the value of the coins and bills in each set. Then determine which set has the greater value by comparing the numbers.

**EXAMPLE**

**Who has saved more money, Allie or David?**

- Allie has $2.25
- David has $5.45

Since $2.25 < $5.45, David has saved more money.

**Write a number sentence comparing the sets of money. Use >, <, or =.**

19.

20.

21. Paulo received one $5-bill and two $1-bills for his birthday. Anna has three $1-bills and one $5-bill. Does Paulo or Anna have more money?

22. Juanita has three $10-bills, two $5-bills, two quarters, and one nickel. Mike has two $20-bills and five dimes. Bill has five $5-bills. Order the value of the sets of money from greatest to least.
Key Concepts

- **Place value** is the value given to a digit by its place in a number. *(Lesson 1)*

<table>
<thead>
<tr>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>hundreds</td>
</tr>
<tr>
<td>9</td>
</tr>
</tbody>
</table>

- To compare numbers use **is less than <** or **is greater than >**, or **is equal to =**. *(Lesson 2)*

246 < 250  
246 is less than 250.

1,125 > 189  
1,125 is greater than 189.

4,260 = 4,260  
4,260 is equal to 4,260.

- A number line can help you **round** numbers, or make them easier to work with. 3,275 rounded to the nearest thousand is 3,000. *(Lesson 3)*

---

Key Vocabulary

- bill
- dollar
- is equal to (=)
- place value
- round
- standard form

Vocabulary Check

Choose the vocabulary word that completes each sentence.

1. One ____?____ is the same as 100¢.

2. Another name for paper money is ____?____.

3. The number 887 ____?____ eight hundred eighty-seven.

4. When you ____?____ 87 to the nearest 10, you get 90.

5. The ____?____ of eight thousand, four hundred fifty-four is 8,454.

6. The value of a digit in a number is its ____?____.
Multi-Part Lesson Review

Lesson 1  Identify Place Value

Place Value Through Ten Thousands (Lessons 1B and 1C)

Write each number in expanded form and word form.
7. 4,013  8. 6,047

Write each number in standard form.
9. 7,000 + 600 + 20 + 2
10. one thousand, two hundred three

Write the place of the underlined digit. Then write its value.
11. 46,887  12. 63,004
13. Write 60,457 in expanded form and word form.
14. Write forty-seven thousand, nine hundred seventy-one in standard form.

Lesson 2  Compare and Order Numbers

Problem-Solving Skill: The Four-Step Plan (Lesson 2A)

15. Vincent played soccer for 3 seasons. Mitchell has played for 3 years. If there are 2 seasons each year, who has played more seasons? Explain.

16. Bo brought 25 pencils to school the first week. He used 5 the first week and 7 the second week. How many pencils are still unused?

EXAMPLE 1
Write 3,456 in expanded form and word form.
Standard Form: 3,456
Expanded Form: 3,000 + 400 + 50 + 6
Word Form: three thousand, four hundred fifty-six

EXAMPLE 2
Write the place of the underlined digit in 23,456. Then write its value.

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<td>hundreds</td>
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<tr>
<td>2</td>
<td>3</td>
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<td>5</td>
<td>6</td>
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</tbody>
</table>
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2 is in the ten thousands place. So, its value is 20,000.

EXAMPLE 3
Estella runs 1 mile one week and then doubles her miles each week after that. In what week will she run 8 miles?

Start with 1. Keep doubling it until you reach 8.

1 mile  Week 1
1 + 1 = 2 miles  Week 2
2 + 2 = 4 miles  Week 3
4 + 4 = 8 miles  Week 4

Estella will run 8 miles in Week 4.
17. A school sold 235 tickets for the third grade play. There were 253 tickets sold for the fourth grade play. For which play were more tickets sold?

Compare. Then order the numbers from greatest to least.

18. 36,201; 35,201; 36,102
19. 89,554; 98,554; 87,554
20. Explain how you know which number is greatest without comparing the value of the digits. 535; 354; 4,435

Round to the Nearest Ten, Hundred, and Thousand

Round to the nearest ten.
21. 56
22. 801

Round to the nearest hundred.
23. 569
24. 1,593

Round to the nearest thousand.
25. 4,509
26. 39,852

Gayla found the receipt below. What is the total amount spent to the nearest thousand?

<table>
<thead>
<tr>
<th>The Sports Store</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treadmill</td>
</tr>
<tr>
<td>Weight set</td>
</tr>
<tr>
<td>Volleyball set</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Round 236 to the nearest hundred.

The closest hundred less than 236 is 200. The closest hundred greater than 236 is 300.

236 is closer to 200 than to 300. So, Coty has about 200 marbles.
Problem-Solving Investigation: Use the Four-Step Plan  (Lesson 3C)

Use the four-step plan to solve each problem.

28. **Algebra** Garrett has twice as many coins as Luke. Luke has 12. How many coins do they have together?

29. For each coupon book Julie sells, she earns 100 points. If she sold 4 books last week and 5 this week, does she have enough points for an 800-point prize? Explain.

30. **Measurement** Mr. Jonas needs to put a fence around part of his yard for his dog. How many feet of fence will he need?

31. Raul says he has 200 knights on horses when he rounds the total to the nearest hundred. How many knights could Raul have? Explain.

32. Star gave each of her 6 friends 5 pieces of paper. She kept the rest. The pack now has 70 pieces of paper left. How many pieces did Star have to begin with?

---

**EXAMPLE 6**

Bart lives 30 miles from a water park. Clint lives 25 miles more than Bart from the same water park. How many miles does Clint live from the water park?

Add to find the total.

\[
30 \quad \text{distance Bart lives} \\
+ \quad 25 \quad \text{distance farther Clint lives} \\
55 \quad \text{total distance Clint lives}
\]

So, Clint lives 55 miles from the water park.

Check by subtracting.

\[
55 - 25 = 30 \checkmark
\]

**EXAMPLE 7**

Raini wants a bike that costs $65. Raini’s father will match any amount of money Raini saved. Raini saved $30. With his father’s help, can he buy the bike?

Add to find the total Raini has.

\[
30 \quad \text{Raini saved} \\
+ \quad 30 \quad \text{Raini’s dad’s match} \\
60 \quad \text{total}
\]

\[
60 < 65
\]

Raini has   Raini needs

No, Raini cannot buy the bike.

**Check**

\[60 \quad 63 \quad 65 \quad 67 \quad 70 \checkmark\]
Coins and Bills

Value of Coins and Bills (Lesson 4A)

Find the value of the bills and coins.

33. 

34. 

35. Kathy has 8 coins that equal $2. Which coins does she have?

Determine Change (Lesson 4B)

A $5-bill was used to buy each item. Determine the change.

36.  

37. 

38. Quincy buys a vase for his mom. It costs $3.32. He pays with a $5-bill. How much change will he receive?

39. Monica buys earrings for $4.44. She pays with a $5-bill. What coins could she receive as change?
Tell whether each statement is true or false.

1. The number 3,578 is written in standard form.

2. Expanded form is a way to write a number in words.

Write the amount of change that should be received.

3. Mel buys a watercolor brush for $0.89. He pays with a $1-bill.

4. Kendra buys a box of jumbo chalk for $2.15. She pays with a $5-bill.

Identify the place of the underlined digit. Then write its value.

5. 3,720
6. 529

7. Measurement Darlene noticed that the meter on her family’s new car showed they have driven two thousand, eight hundred eighteen miles so far. How is that number written in standard form?

Write each number in expanded form and word form.

8. 6,191
9. 19,804

10. MULTIPLE CHOICE How is four thousand, three hundred twenty-one written in standard form?

   A. 3,421
   B. 4,021
   C. 4,231
   D. 4,321

11. Find the value of the coins.

   Compare. Use >, <, or =.

12. 8,415 __ 8,541
13. 500 + 80 + 9 __ 589
14. Order from least to greatest.
    4,804; 4,408; 8,440
15. Order the number of baskets from least to greatest.

<table>
<thead>
<tr>
<th>Career Baskets</th>
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</thead>
<tbody>
<tr>
<td>Player</td>
</tr>
<tr>
<td>Roz</td>
</tr>
<tr>
<td>Marquez</td>
</tr>
<tr>
<td>Amada</td>
</tr>
</tbody>
</table>

Round each number to the nearest ten, hundred, and thousand.

16. 2,942
17. 9,267

18. MULTIPLE CHOICE Which digit is in the thousands place in the number 92,108?

   F. 1
   G. 2
   H. 8
   I. 9

19. WRITE MATH Give an example of when it is appropriate to round numbers.
A pet shop sold 1,372 turtles. Which of these equals 1,372?

A. 1 + 3 + 7 + 2
B. 1 + 30 + 70 + 2000
C. 100 + 300 + 70 + 2
D. 1000 + 300 + 70 + 2

Read the Question
You need to find which equals 1,372.

Solve the Question
You can use a place-value chart to find the value of each digit in 1,372.

1,372 = 1000 + 300 + 70 + 2.

So, the answer is D.

Read each question. Then fill in the correct answer on the answer sheet provided by your teacher or on a separate sheet of paper.

1. The train traveled 415 miles. Which point represents 415?

   - A. N
   - B. P

2. Which of the following is three hundred forty-two?

   - F. 234
   - G. three hundred twenty-four
   - H. 342
   - I. 300 + 40 + 20
3. Darcy walked 3,737 steps this morning. What number is 3,737 rounded to the nearest ten?
   A. 3,740  C. 3,800
   B. 3,780  D. 4,000

4. What is this number in standard form?

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</table>

   F. 1,432  H. 1,234
   G. 1,342  I. 132

5. Robert received the change shown below. What is the value of his change?

   A. $1.60  C. $1.70
   B. $1.65  D. $1.75

6. Leonardo has 158 baseball cards in his collection. What is 158 in expanded form?
   F. 1 + 5 + 8  H. 10 + 50 + 8
   G. 15 + 8     I. 100 + 50 + 8

7. There are 6,624 hours in 276 days. What is 6,624 rounded to the nearest thousand?
   A. 7,000  C. 6,600
   B. 6,620  D. 6,000

8. Tell the value of the digit in the thousands place.

   17,523
   F. 10,000  H. 500
   G. 7,000  I. 20

9. Bertram played with 5 toy sailboats in the pool. He gave 2 to a friend. How many sailboats does Bertram have now?
   A. 7  C. 3
   B. 5  D. 1

NEED EXTRA HELP?

<table>
<thead>
<tr>
<th>If You Missed Question . . .</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<td>1-2C</td>
<td>1-1B</td>
<td>1-3A</td>
<td>1-1B</td>
<td>1-4A</td>
<td>1-1B</td>
<td>1-3B</td>
<td>1-1C</td>
<td>1-2A</td>
</tr>
</tbody>
</table>

For help with . . .

| SPI 2.4 | SPI 2.1 | GLE 1.2 | SPI 2.1 | SPI 1.3 | SPI 2.1 | GLE 1.2 | SPI 2.2 | SPI 2.9 |