Write the number of tens and the number of ones in each number.
(1) 56
(2) 708
(3) 6,170
$\qquad$ tens $\qquad$ tens $\qquad$ tens
$\qquad$ ones
_ ones $\qquad$ ones

Write the number of thousands and the number of hundreds in each number.
(4) 4,982
(5) 316
(6) 2,057
$\qquad$ thousands
$\qquad$ hundreds $\qquad$ hundreds
$\qquad$ thousands
$\qquad$ hundreds

Make a place-value drawing for each number, using ones, quick tens, hundred boxes, and thousand bars.
(7) 36
(8) 510
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(9) 403
(10) 1,072

Multiply or divide.
(1) $8 \times 3=$ $\qquad$
(2) $40 \div 4=$ $\qquad$
(3) $27 \div 9=$ $\qquad$
(4) $7 \times 6=$ $\qquad$
(5) $2 \times 8=$ $\qquad$
(6) $6 \times 5=$ $\qquad$

Use the diagram to complete Exercises 7-10.


Write two related multiplication problems for the diagram.


8
Write two related division problems for the diagram.
9 $\qquad$ 10 $\qquad$
(11) Stretch Your Thinking Marcus says this place value drawing represents the number 4,083. Owen says it represents 483. Which student is correct? Explain the error.


Read and write each number in standard form.
(1) $90+2$
(2) $600+80+9$ $\qquad$
(3) $2,000+800+50+7$ $\qquad$
(4) $3,000+80+5$ $\qquad$

Read and write each number in expanded form.
(5) 48
(6) 954 $\qquad$
(7) 6,321 $\qquad$
( 4,306
$\qquad$
(9) 1,563
(10) 2,840 $\qquad$

Read and write each number in word form.
(11) $300+20+5$
(12) $5,000+700+40+8$ $\qquad$
(13) $9,000+400+6$ $\qquad$
Read and write each number in standard form.
(14) seventy-six $\qquad$
(15) three hundred one $\qquad$
16 four thousand, two hundred sixteen $\qquad$
(17) five thousand, one hundred forty-two $\qquad$
Write the value of the underlined digit.
(18) 287 $\qquad$
(19) 8,792 $\qquad$
(20) 7, 812

Multiply or divide.
(1) $6 \times 4=$ $\qquad$
(2) $56 \div 8=$ $\qquad$
(3) $45 \div 9=$ $\qquad$
(4) $6 \times 6=$ $\qquad$
(5) $3 \times 7=$ $\qquad$ (6) $48 \div 6=$ $\qquad$
(7) Grace read six books over the summer. Her sister read three times that number. How many books did Grace's sister read over the summer?

Write the number of thousands and the number of hundreds in each number.
( 5,812
$\qquad$ thousands
$\qquad$ hundreds
(9) 7,026
$\qquad$
thousands
$\qquad$ hundreds

Make a place value drawing for each number, using ones, quick tens, hundred boxes, and thousand bars.
(10) 603
(11) 3,187

12 Stretch Your Thinking Mr. Thomas writes 4, 964 on the board. Amy says the value of the underlined digit is 9 . Chris said the value is 900 . Which student is correct? Explain.

Round each number to the nearest thousand.
(1) 6,578 $\qquad$ (2) 4,489 $\qquad$ (3) 8,099
(4) 2,761 $\qquad$

Round each number to the nearest hundred.
(5) 789
(6) 971 $\qquad$ (7) 2,759
( 3,148
$\qquad$
Round each number to the nearest ten.
(9) 46
(10) 381
(11) 4,175
(12) 5,024 $\qquad$

Compare using $>$, $<$, or $=$.
(13) $4,538 \bigcirc 4,835$
(14) 3,554
3,449
(15) $1,289 \bigcirc 1,298$
(16) $7,235 \bigcirc 6,987$
(17) 4,004

(18) 5,609


Solve.
(19) When you round a number, which digit in the number helps you decide to round up or round down? Explain your answer.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
(20) When you round a number, what should you do with the digits to the right of the place to which you are rounding?
$\qquad$
$\qquad$
$\qquad$

Find the unknown number.
(1) $4 \times 8=$ $\qquad$
(2) $42 \div 7=$ $\qquad$
(3) $63 \div$ $\qquad$ $=9$
(4) $\qquad$ $\times 5=40$
(5) $9 \times$ $\qquad$ $=81$
6 $\qquad$ $\div 6=10$
(7) $21 \div 7=$
$\qquad$ (8) $10 \times$ $\qquad$ $=100$

Write the number of tens and the number of ones in each number.
(9) 607
(10) 9,324
$\qquad$ tens
$\qquad$ ones
$\qquad$ tens
$\qquad$ ones

Read and write each number in standard form.
(11) $40+3$ $\qquad$
(12) $500+70+9$ $\qquad$
(13) $1,000+200+50+8$ $\qquad$
(14) $8,000+70+7$
(15) Stretch Your Thinking Sara is thinking of a number. When she rounds her number to the nearest hundred, she gets 700 . What is the greatest number Sara can be thinking of? Explain.

Read and write each number in expanded form.
(1) 39,012 $\qquad$ (2) 640,739
(3) 102,453 $\qquad$ (4) 460,053
$\qquad$
$\qquad$

Read and write each number in word form.
(5) 1,000,000
$\qquad$
(6) 730,812
(7) 45,039

8 600,439
$\qquad$
Read and write each number in expanded form.
(9) nine hundred twenty-three thousand, nine hundred twenty-three

11 seventy-six thousand, five
(13) seven hundred thousand, four hundred thirty
$\qquad$
$\qquad$

Use the numbers 7, 9, and 63 to complete the related equations.
(1) $7 \times$ $\qquad$ $=$ $\qquad$ (2) $9 x$ $\qquad$ $=$ $\qquad$
(3) $\qquad$ $\div$ $\qquad$ $=7$
(4) $\qquad$ $\div$ $\qquad$ $=9$

Solve.
(5) Aileen made 36 mini muffins for the school bake sale. Each bag holds four mini muffins. How many bags of mini muffins will she have for the bake sale?

Read and write each number in expanded form.
$\qquad$ (7) 421 $\qquad$
( 7,915 $\qquad$ (9) 3,402 $\qquad$

Write the value of the underlined digit.
(10) 489
(11) 7,493
(12) 1,506 $\qquad$

Round each number to the nearest ten.
(13) 47
(14) 6,022 $\qquad$
Round each number to the nearest hundred.
(15) 672
(16) 3,940

17 Stretch Your Thinking How many zeros are in the standard form of six hundred thousand, twenty? Explain.

Compare using $>,<$, or $=$.
(1) $57,068 \bigcirc 57,860$
(2) $24,516 \bigcirc 24,165$
(3) $154,424 \bigcirc 145,424$
(4) $836,245 \bigcirc 683,642$
(5) $89,175 \bigcirc 89,175$
(6) 100,000 $\bigcirc 1,000,000$

Round to the nearest ten thousand.
(7) 11,295 $\qquad$ (8) 82,964 $\qquad$ (9) 97,079
$\qquad$
Round to the nearest hundred thousand.
(10) 153,394 $\qquad$
(11) 410,188 $\qquad$
(12) 960,013 $\qquad$ (13) 837,682 $\qquad$

Solve.
(14) What would 672,831 be rounded to the nearest:
a. ten? $\qquad$
b. hundred? $\qquad$
c. thousand? $\qquad$
d. ten thousand? $\qquad$
e. hundred thousand? $\qquad$
(15) Compare the number 547,237 rounded to the nearest hundred thousand and 547,237 rounded to the nearest ten thousand. Which is the greater number? Write a comparison statement and explain your answer.
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Find the unknown value in the number sentence.
(1) $8 \times k=16$
$k=$ $\qquad$
(2) $n \times 9=90$
$n=$ $\qquad$
(3) $35 \div t=5$ $t=$
(4) $p \div 6=9$
$p=$ $\qquad$

Solve.
(5) In an arcade game, Nick can earn up to 10 tickets, depending on which slot his coin goes through. If he plays the game six times, what is the greatest number of tickets Nick could earn?

Round each number to the nearest thousand.
(6) 2,950
$\qquad$ (7) 4,307 $\qquad$
Read and write each number in word form.
(16,977
(9) 403,056 $\qquad$
(10) Stretch Your Thinking Leon says that he can compare numbers in the same way that he alphabetizes words. For example, since the first two letters of cat and cane are the same, he goes to the next letter to compare. Since $n$ comes before $t$ in the alphabet, the word cane comes first in a dictionary. To compare 64,198 with 641,532, he knows that the first three digits 641 are the same. Then he compares the next digit in each number. Since 9 is greater than 5 , the number 64,198 must be greater. Is Leon's way of thinking correct? Explain.

Use the information in the table to answer the questions.
Driving Distances (in miles) between Various Cities in the United States

|  | New York, NY | Chicago, IL | Los Angeles, CA |
| :--- | :---: | :---: | :---: |
| Atlanta, GA | 886 | 717 | 2,366 |
| Dallas, TX | 1,576 | 937 | 1,450 |
| Nashville, TN | 914 | 578 | 2,028 |
| Omaha, NE | 1,257 | 483 | 1,561 |
| Seattle, WA | 2,912 | 2,108 | 1,141 |
| Wichita, KS | 1,419 | 740 | 1,393 |

(1) If you drive from New York to Dallas and then from

Dallas to Chicago, how many miles would you drive?
(2) Which two cities are farther apart in driving distance: Seattle and Los Angeles or Wichita and New York? Use place value words to explain your answer.

Use any method to add. On another sheet of paper, make a drawing for exercise 5 to show your new groups.
(3) 1,389
$+5,876$
(4) 3,195
$+2,674$
(5) 1,165
$+7,341$
(8) 8,598
$\begin{array}{r}+5,562 \\ \hline\end{array}$
(9) 4,295
(10) $\begin{array}{r}6,096 \\ +9,432 \\ \hline\end{array}$

Multiply or divide.
(1) $81 \div 9=$ $\qquad$ (2) $7 \times 4=$ $\qquad$
(3) $9 \times 3=$ $\qquad$
(4) $24 \div 4=$ $\qquad$
(5) 7
$\begin{array}{r}7 \\ \times 8 \\ \hline\end{array}$
(6) 5
7
$\times$
(7) $1 0 \longdiv { 8 0 }$
(8) $7 \longdiv { 4 2 }$

Read and write each number in expanded form.
(9) eighty-six thousand, nine hundred twenty-one
(10) nine hundred twenty thousand, four hundred thirteen

Compare using $>,<$, or $=$.
(11) $36,290 \bigcirc 36,290$
(12) $438,000 \bigcirc 43,800$
(13 298,150 $\bigcirc 298,105$
(14) $999,999 \bigcirc 1,000,000$
(15) Stretch Your Thinking Find the unknown digits in the following addition problem.


Copy each exercise, lining up the places correctly. Then add.
(1) $51,472+7,078$
(2) $94,280+56,173$
(3) $1,824+36,739$
(4) $372,608+51,625$
(5) $314,759+509,028$
(6) $614,702+339,808$
(7) $493,169+270,541$
( $8168,739+94,035$

The table shows the surface area of each of the Great Lakes.

Use the data in the table to help answer the following questions.

| Lake | Surface Area (square miles) |
| :--- | :---: |
| Erie | 9,906 |
| Huron | 22,973 |
| Michigan | 22,278 |
| Ontario | 7,340 |
| Superior | 31,700 |

(9) Which is greater, the surface area of Lake Superior,

Show your work. or the sum of the surface areas of Lake Michigan and Lake Erie?
(10) Which two lakes have a combined surface area of 30,313 square miles?

Multiply or divide.
(1) $30 \div 5=$ $\qquad$
(3) $4 \times 6=$ $\qquad$
(5) $3 \times 9=$ $\qquad$

Compare using $>,<$, or $=$.
(7) 6,299 62,990
(8)389,151 394,027
(9)134,657 9134,257
(10) 93,862


Use any method to add.
(11) 1,362
$\begin{array}{r}6,509 \\ \hline\end{array}$
(12) 3,893
$\begin{array}{r}\text { + } 5,245 \\ \hline\end{array}$
(13) 6,399
$\begin{array}{r}7,438 \\ \hline\end{array}$

14 Stretch Your Thinking Peter adds 245,936 + 51,097 as follows. Explain his error. What is the correct sum?

$$
\begin{array}{r}
2451936 \\
+51,097 \\
\hline 756,906
\end{array}
$$

$\qquad$
$\qquad$

Write a number sentence that shows an estimate of each answer. Then write the exact answer.
(1) $69+25$
(2) $259+43$
(3) $2,009+995$
(4) 5

3
7
$+4$
(5) 38

54
$+52$

(6) 28

44
32
$+46$
(7) 243

625
$+387$
(8) 154 131 204
$+179$

Solve.
(9) Paul's stamp collection includes 192 domestic and 811 foreign stamps.

About how many domestic and foreign stamps does Paul have altogether?

Exactly how many domestic and foreign stamps does Paul have altogether?
(10) Plane A travels 102,495 miles. Plane B travels 91,378 miles. How many miles in all do the two planes travel?

Explain how you can use estimation to check that your answer is reasonable.
$\qquad$
$\qquad$
$\qquad$

What is 362,584 rounded to the nearest:
(1) hundred? $\qquad$ (2) thousand? $\qquad$
(3) ten thousand? $\qquad$ (4) hundred thousand? $\qquad$
Use any method to add.
(5) 2,938
(6) 8,305
$\begin{array}{r}4,271 \\ \hline\end{array}$
$\begin{array}{r}+1,467 \\ \hline\end{array}$
(7) 8,074
$\begin{array}{r}+3,552 \\ \hline\end{array}$

Copy each exercise, lining up the places correctly. Then add.
(8) $45,296+38,302$
(9) $293,017+58,226$
(10) Stretch Your Thinking Luanne estimates the sum of $39+15$ is about $40+15$, or 55 . Jacob estimates the sum of $39+15$ is about $40+20$, or 60 . Which estimate is closer to the exact sum? Explain.
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Subtract. Show your new groups.
(1) $\begin{array}{r}7,000 \\ -3,264 \\ \hline\end{array}$
4) 4,000
$-2,945$
(5) 8,531
$\begin{array}{r}-7,624 \\ \hline\end{array}$
8 6,000
$-5,036$
(9) 7,180
$-4,385$
(10) 6,478
$-3,579$
(11) 9,490
$-5,512$
(12) 5,000
$-3,609$

Solve.
Show your work.
(13) A cross-country automobile rally is 1,025 kilometers long. At a stopping place, the leader had traveled 867 kilometers. How far away was the finish line?
(14) A census counted 5,407 people in Marina's home town. If 3,589 are males, how many are females?
(15) A construction company is building a stone wall. The finished wall will contain 5,000 stones. So far, 1,487 stones have been placed. How many stones have not been placed?

Use any method to add.

1 6,022
$+1,988$
(2) 4,586
$+1,693$
(3) 8,374
$\begin{array}{r}+3,707 \\ \hline\end{array}$

The table shows the amount of litter collected from parks across a city on Earth Day each year. Use the data in the table to help answer the following questions.
(4) How much litter was collected altogether in 2007 and 2008?
(5) Which two years had a combined litter collection of 23,456 pounds?

Litter Collected on Earth Day

| Year | Pounds of Litter |
| :---: | :---: |
| 2007 | 8,293 |
| 2008 | 12,104 |
| 2009 | 15,877 |
| 2010 | 11,352 |

Write an equation that shows an estimate of each answer. Then write the exact answer.
(6) $495+812$
(7) $7,203+299$ $\qquad$
(8) $2,859+6,017$ $\qquad$
(9) Stretch Your Thinking Bridget ungrouped 5,000 as shown. Use your understanding of place value to explain how the ungrouped number is equal to 5,000 .

Subtract. Then use addition to check the subtraction.
Show your work.
(1) $1,400-238=$

Check: $\qquad$
(3) $4,620-1,710=$ $\qquad$

Check: $\qquad$
(5) $3,142-1,261=$ $\qquad$

Check: $\qquad$

Solve.
(2) $1,900-1,238=$

Check: $\qquad$
(4) $5,243-2,454=$ $\qquad$

Check: $\qquad$
(6) $2,375-896=$ $\qquad$

Check: $\qquad$

Show your work.
(7) A school library has 1,058 books in its collection.

The town library has 4,520 books in its collection.
How many books are there altogether?
$\qquad$
8 A town official knows how many books the town library has and how many books both libraries have altogether. She wants to know how many books the school library has. How can she use subtraction to find the answer?
$\qquad$

Copy each exercise, lining up the places correctly. Then add.
(1) $32,418+508,182$
(2) $734,150+60,382$

Solve.
Show your work.
(3) The entire fourth grade is made up of 102 boys and 86 girls. About how many students are in the fourth grade altogether?

Exactly how many students are in the fourth grade altogether?

Subtract. Show your new groups.
(4) 5,000
$-2,583$
(5) 8,259
$-3,716$
(6) 2,081
$-1,733$

7 Stretch Your Thinking What is the unknown number in this break-apart drawing? List all the addition and subtraction problems for the drawing.
$\qquad$
$\qquad$
$\qquad$



Subtract.
(1) $\begin{array}{r}71,824 \\ -36,739 \\ \hline\end{array}$
(2) $\begin{array}{r}960,739 \\ -894,045 \\ \hline\end{array}$
(3) $\begin{array}{r}665,717 \\ -\quad 82,824 \\ \hline\end{array}$
(4) $\begin{array}{r}372,608 \\ -\quad 57,425 \\ \hline\end{array}$
(5) $\begin{array}{r}597,603 \\ -404,980 \\ \hline\end{array}$
(6) $\begin{array}{r}614,702 \\ -539,508 \\ \hline\end{array}$
(7) $\begin{array}{r}724,359 \\ -\quad 99,068 \\ \hline\end{array}$
(8) $\begin{array}{r}394,280 \\ -\quad 56,473 \\ \hline\end{array}$

In an experiment, a scientist counted how many bacteria grew in several labeled dishes. The table shows how many bacteria were in each dish.

| Dish | Number of Bacteria |
| :--- | :---: |
| A | 682,169 |
| B | 694,154 |
| C | 57,026 |
| D | 150,895 |
| E | 207,121 |

Solve. Estimate to check.
Show your work.
(9) What was the difference between the greatest number of bacteria and the least number of bacteria?
$\qquad$
10 How many more bacteria were in dish $A$ than in dish $D$ ?

11 How many fewer bacteria were in dish E than in the combined dish C and dish D ?

Write an equation that shows an estimate of each answer. Then write the exact answer.
(1) $503+69$
(2) $2,825+212$ $\qquad$
(3) $6,190+3,858$ $\qquad$

Subtract. Show your new groups.
(4) 8,760
(5) 6,000
(6) 5,060
$-1,353$
$-5,258$
$\begin{array}{r}-2,175 \\ \hline\end{array}$

Subtract. Then use addition to check the subtraction. Show your work.
(7) $6,355-891=$
(8) $8,326-1,425=$

Check: $\qquad$ Check: $\qquad$
(9) Stretch Your Thinking Write an addition word problem in which the estimated sum is 14,000 .
$\qquad$
$\qquad$
$\qquad$

Solve each problem.
Show your work.
(1) Mr. Chase is ordering 249 pencils, 600 sheets of paper, and 190 erasers. How many more sheets of paper than pencils and erasers altogether is Mr. Chase ordering?
(2) There were 623 people at the concert on Friday. On Saturday, 287 more people attended the concert than attended on Friday. How many people in all attended the concert on Friday and Saturday?

Add or subtract.
(3) 695
$+487$
(4) 8,452
$\begin{array}{r}-5,938 \\ \hline\end{array}$
(5) 5,895
$\begin{array}{r}\text { 9, } \\ +927 \\ \hline\end{array}$
(6) 49,527

- 26,088
(7) 86,959
$-38,486$
(8) $\begin{array}{r}39,458 \\ +\quad 98,712\end{array}$
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(9) 286,329

| $+394,065$ |
| :--- |

(10) 708,623
$-421,882$
(11) 952,774

- 613,386

Add or subtract.
1 7,982
$-3,517$
(2) 600,000

- 399,410
(3) 138,925
$+47,316$

Subtract. Then use addition to check the subtraction. Show your work.
(4) $4,652-1,593=$
$\qquad$

Check:
$\qquad$
Subtract.
(7) 731,285-369,114 = $\qquad$ (8) $645,803-52,196=$ $\qquad$
(9) Stretch Your Thinking Write a two-step problem in which the answer is 130 .
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Add or subtract.
(1) $12,673-9,717=$ $\qquad$ (2) $8,406+45,286=$ $\qquad$ (3) $2,601-1,437=$ $\qquad$

Answer each question about the information in the table.
Area of the Countries of Central America

| Country | Area (square miles) |
| :--- | :---: |
| Belize | 8,867 |
| Costa Rica | 19,730 |
| El Salvador | 8,124 |
| Guatemala | 42,042 |
| Honduras | 43,278 |
| Nicaragua | 49,998 |
| Panama | 30,193 |

(4) What is the total area of Guatemala and Honduras?

Show your work.
$\qquad$
(5) Which two countries have the least area? What is the sum of their areas?
$\qquad$
(6) Which is greater: the area of Nicaragua or the total area of Costa Rica and Panama?
$\qquad$
7 How much greater is the area of Honduras than the area of Guatemala?

Subtract. Then use addition to check the subtraction.
(1) $1,500-705=$ $\qquad$
(2) $9,523-8,756=$ $\qquad$

Check: $\qquad$ Check: $\qquad$
The table shows how many fans attended a team's baseball games at the start of the season. Solve. Estimate to check.
(3) How many fewer people attended Game 4 than Game 5?

| Game | Fans |
| :---: | ---: |
| 1 | 68,391 |
| 2 | 42,908 |
| 3 | 9,926 |
| 4 | 35,317 |
| 5 | 46,198 |

(4) What was the difference between the greatest number of fans and the least number at a game?
$\qquad$
$\qquad$

## Add or subtract.

(5) 7,452
(6) 2,155
(7) 293,635
$+3,801$
$+5,890$
$\begin{array}{r}-178,098 \\ \hline\end{array}$

8 Stretch Your Thinking The equation $32,904+m=61,381$ shows that the number of females plus the number of males, $m$, living in a certain city equals the total population.
Write a subtraction equation that represents the same situation. How many males live in this city?

Companies often use bar graphs to present information to the media or stockholders. Data may show how attendance or profits vary at different times of the year, or compare the successes of different divisions or quarters of the year.
(1) Research attendance numbers for your favorite amusement park, sporting team, or movie during five different periods of time. Complete the table with your information.

|  |  |
| :--- | :--- |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

(2) Use the grid below to graph the data in your table.


## Subtract.

(1) $958,299-63,419=$ $\qquad$ (2) $9,523-8,756=$ $\qquad$

Add or subtract.
(3) 5,191
$\begin{array}{r}573 \\ +\quad 273 \\ \hline\end{array}$
(4) 13,687
$+25,137$
(5) 758,194
7,029
$-\quad 6$

Answer each question about the information in the table.
(6) What is the total number of miles the trucker drove in the last 2 years?

7 Which is greater, the increase in miles driven between 1998 and 1999 or between 1999 and 2000? What is that increase?

Miles Driven by a Trucker

| Year | Miles |
| :---: | :---: |
| 1998 | 75,288 |
| 1999 | 117,391 |
| 2000 | 126,304 |
| 2001 | 87,192 |
| 2002 | 94,386 |

8 Stretch Your Thinking Look at the trucking data in the table for Exercises 6 and 7. How would you round the data to make a bar graph? What scale would you use?
$\qquad$
$\qquad$

