Third Grade
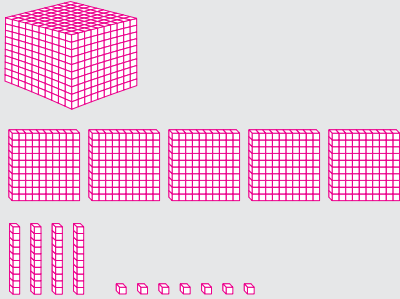# Answer Key
Unit 1: Place Value

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Problem of the Day

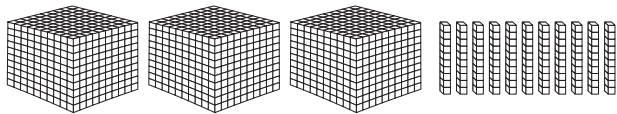## Lesson 1

How do you represent 1,547 in base ten form?

Lesson 2

What number is represented by the base 10 blocks below?

Answer: _____**3,110**_____

Lesson 3

Katie is thinking of a number with a 8 in the ten thousands and hundreds place. Which of the following could be Katie's number?

A. 87,008

B. 78,080

C. 87,008

D. 87,808

Lesson 4

Mandy looked at the population of the cities below.

City	Population
Ft. Worth	729,727
College Station	100,050
Huntsville	186,254

Which city has a population of 7 hundred thousands, 2 ten thousands, 9 thousands, 7 hundreds, 2 tens, and 7 ones?

Answer: _____**Ft. Worth**_____

Lesson 5

A crayon factory sells crayons in packs of 100. If the factory makes 850,000 crayons, how many packs will be made?

Answer: _____**8,500**_____

Explain your reasoning:

100 crayons go in each pack so you divide 850,000 by 100.

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Problem of the Day

Lesson 6

Write the number below in standard form.

$(9 \times 100{,}000) + (5 \times 1{,}000) + (6 \times 1)$

Answer: ___905,006___

Lesson 7

How can the sum of 4 hundred thousands, 9 ten thousands, and 8 tens be expressed in standard form?

Answer: ___490,080___

Lesson 8

Write a number that has a 7 in the ten thousands place and a 3 in the hundreds place.

Answer: **70,300; answers may vary**

Lesson 9

Smith's Shoe Store produced 84,700 pairs of shoes. What is another way to say this number?

A. 847 tens

B. 84,700 tens

C. 847 hundreds

D. 8,470 hundreds

Explain why you chose that answer:

847 starts in the hundreds place

Lesson 10

What is the relationship between the ten thousands place and the thousands place in the number shown below?

78,023

A. The thousands place is ten times the ten thousands place.

B. The ten thousands place is ten times the thousands place.

C. The thousands place is one hundred times the ten thousands place.

D. The ten thousands place is one hundred times the thousands place.

Problem of the Day

Lesson 11

Order these numbers from least to greatest.

87,808   88,707   87,880   88,770

88,770; 88,707; 87,880; 87,808
_____, _____, _____, _____

Lesson 12

Terry counted 480 cars in the parking lot. Which of the following is not the same as 480?

A. 4 hundreds and 8 tens

B. 48 tens

C. 480 ones

D. 48 hundreds

Lesson 13

Which place value is used to show that 19,432 is less than 145,009?

A. Ones

B. Tens

C. Thousands

D. Hundred Thousands

Lesson 14

A group of numbers is shown below.

67,007   66,606   66,766   67,060

Which of the following statements is true?

A. 67,000 < 66,766, because 0 < 6

B. 66,606 = 66,766, because 6 = 6

C. 67,007 > 67,060, because 7 > 0

D. 67,007 < 67,060, because 7 < 60

Lesson 15

Examine the numbers below.

45,090

Round this number to the nearest ten.

45,090

Round this number to nearest hundred.

45,100

Problem of the Day

Lesson 16

Compare the numbers below. Write the appropriate sign in the middle.

909,070 __**<**__ 909,700

Explain your answer:

700 is greater than 70

Lesson 17

The population of Austin, Texas in 2013 was 885,442 people. What is this number rounded to the nearest hundred?

885,400

Lesson 18

Which statement about the number 2,305 is true?

A. There is a 3 in the hundreds place, so 3 × 100 = 3,000.

B. There is a 2 in the thousands place, so 2 × 10,000 = 2,000.

C. There is a 3 in the hundreds place, so 3 × 100 = 300.

Lesson 19

The table below shows how many students were at Timber Woods Elementary School on Monday, Tuesday, and Wednesday.

Day of the Week	Number of Students
Monday	699
Tuesday	706
Wednesday	710

Estimate the number of students that were at school on Monday and Wednesday.

Answer: ____**40,000**____

Lesson 20

Examine the numbers below.

101,003

Write in expanded form:
100,000 + 1,000 + 3

Write in expanded notation:
1 × 100,000 + 1 × 1,000 + 3 × 1

Write in word form:

one hundred thousand, one thousand, three

Pre-Assessment

For numbers 1–2, listen as your teacher calls out numbers.
Write the numbers in standard form.

1.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
		Answer will vary.			

2.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
		Answer will vary.			

Read each problem and solve.

3. Hank is thinking of a number that has a 5 in both the thousands and the ones place. Which of the following could be Hank's number?

  A. 55,000

  B. 50,505

  C. 55,005

  D. 5,550

4. Tina is thinking of a number that rounds to 700. Which of the following could not be Tina's number?

  A. 702

  B. 745

  C. 765

  D. 680

5. The ice cream factory produced 100,000 gallons of ice cream. What is another way to say this number?

  A. 100 hundreds

  B. 10 thousands

  C. 10 ten thousands

  D. 1,000 tens

Read each problem below and solve.

6. What is the place value of the underlined digit.

9̲80,665

    A. Hundreds
    B. Ten Thousands
    C. Hundred Thousands
    D. Ones

7. Compare the numbers below. Write the correct symbol.

65,909   **<**   65,990

8. The Sneaker Show factory has 14,309 employees. What is 14,309 in word form?

    A. Fourteen thousand, three hundred ninety
    B. Fourteen hundred thousand, three hundred nine
    C. Fourteen thousand, three hundred nine
    D. Fourteen hundred thousand, three hundred ninety

9. What is 10,045 in expanded form?

    A. 10 + 0 + 40 + 5
    B. 100 + 0 + 40 + 50
    C. 10,000 + 40 + 5
    D. 10,000 + 400 + 5

10. Order the numbers from greatest to least.

11,234   12,639   10,987   13,456

13,456; , **12,639;** , **11,234;** , **10,987**

Dissecting Place Value

Draw each number in base ten form and then write the expanded form and word form. Cut around the dotted rectangles and glue into your Math Journal.

5,903

Base Ten Form

Expanded Form:

5,000 + 900 + 3

Word Form:

Five thousand, nine hundred, three

_____

47,682

Base Ten Form

47

Expanded Form:

40,000 + 7,000 + 600 + 80 + 2

Word Form:

Forty-seven thousand, six hundred

eighty two thousand, one

359,001

Base Ten Form

359

Expanded Form:

300,000 + 50,000 + 9,000 + 1

Word Form:

Three hundred fifty-nine thousand,

one

Base Ten Conversions

10
10 Ones

100
100 Ones
10 Tens

1,000
1,000 Ones
100 Tens
10 Hundreds

10,000
10,000 Ones
1,000 Tens
100 Hundreds
10 Thousands

100,000
100,000 Ones
10,000 Tens
1,000 Hundreds
100 Thousands
10 Ten Thousands

Naming Numbers

Cut on the dotted line and glue the chart into your Math Journal. Use place value and Base Ten Blocks to name each number in different ways.

Example: 10,000 can be shown as 10,000 ones, 1,000 tens, 100 hundreds, or
10 thousands.

	Thousands	Hundreds	Tens	Ones
43,000	43	430	4,300	43,000
29,000	29	290	2,900	29,000
56,000	56	560	5,600	56,000
19,000	19	190	1,900	19,000
31,000	31	310	3,100	31,000

Naming Numbers 2

1. The candy hearts factory produced 225,000 candy hearts last month. What is another way to say this number?

    A. 225 hundreds

    B. 22,500 tens

    C. 2,250 thousands

    D. 22,500 ones

2. What is the place value of the underlined digit.

4̲35,787

    A. Ten thousands

    B. Hundred thousands

    C. Thousands

    D. Hundreds

3. Henry is thinking of a number with a 8 in the thousands place. Which of these numbers could be Henry's number?

    A. 879,008

    B. 89,888

    C. 880,008

    D. 808,808

4. Examine the number below.

908,573

Write the number in expanded notation.

9 × 100,000 + 8 × 1,000 + 5 × 100 + 7 × 10 + 3

Place Value Quiz

For numbers 1–2, your teacher will call out numbers. Write the numbers in standard form.

1.

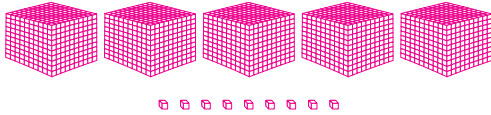| Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
		Answers will vary.			

2.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
		Answers will vary.			

Fill in the chart below for a quick place value check.

3. One hundred fifty-six thousand, two hundred	Change to Expanded Form	**1 × 100,000 + 5 × 10,000 + 6 × 1,000 + 2 × 100**
4. 808,804	Change to Word Form	**Eight hundred eight thousand, eight hundred four**
5. 900,000 + 6,000 + 40 + 3	Change to Standard Form	**906,043**
6. 5,009	Change to Base Ten Form	

Represent the numbers below using the place values shown. **Example:** 10,000 can be said as 10,000 ones, 1,000 tens, 100 hundreds, or 10 thousands.

	Thousands	Hundreds	Tens	Ones
85,000	**85 thousands**	**850 hundreds**	**8,500 tens**	**85,000 ones**
670,000	**670 thousands**	**6,700 hundreds**	**67,000 tens**	**670,000 ones**

Comparing and Ordering Numbers Quiz

1. Order the numbers greatest to least.

45,706   46,577   45,760

___**46,577**___, ___**45,760**___, ___**45,706**___

2. Order the numbers least to greatest.

101,543   101,453   110,435

___**101,453**___ ___**101,543**___ ___**110,435**___

Compare the numbers below by using the <, >, or = symbols.

3.   76,807 **>** 76,708

4.   545,677 **>** 544,676

5.   78,909 **=** 78,909

6.   678,900 **<** 687,900

7.   101,101 **<** 101,110

8.   909,909 **<** 919,909

9. A group of numbers are shown below.

99,898   98,898   99,899   99,888

Which statement is true?
A. 99,898 = 98,898, because 898 = 898.
B. 98,898 > 99,888, because 898 > 888.
C. 99,899 < 99,898, because 899 < 898.
D. 99,899 > 99,888, because 99 > 88

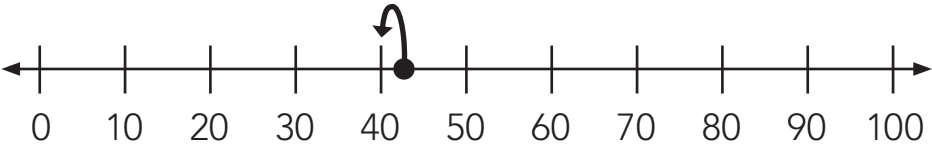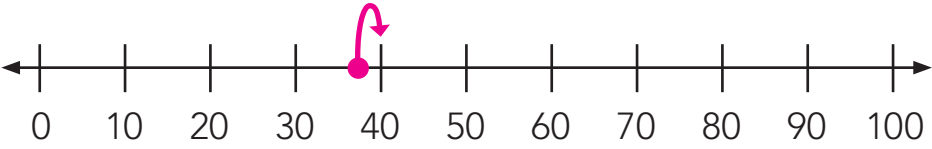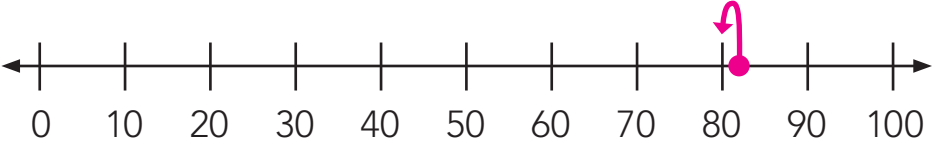**10.** What place value is used to show that 76,034 is less than 76,043?
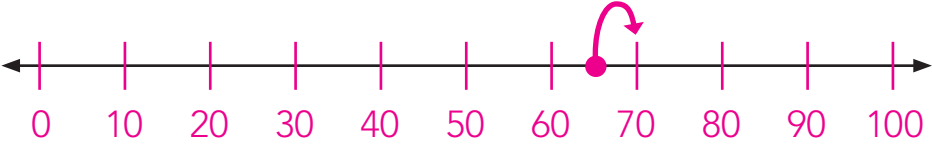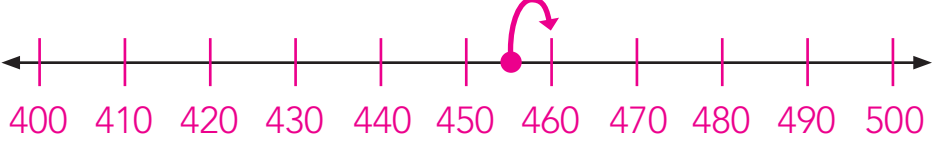**A.** ones
B. hundreds
C. tens
D. thousands

Rounding with Number Lines

Examine each number given. Place the number on its spot on the number line. Determine which ten the number line is closest to by drawing an arrow. Then round the number to the closest ten and record your answer. The first one is done for you.

Number	Draw on Number Line	Rounded to Nearest Ten
42	0 10 20 30 40 50 60 70 80 90 100	40
38	0 10 20 30 40 50 60 70 80 90 100	40
97	0 10 20 30 40 50 60 70 80 90 100	100
81	0 10 20 30 40 50 60 70 80 90 100	80
65	0 10 20 30 40 50 60 70 80 90 100	70
246	200 210 220 230 240 250 260 270 280 290 300	250
221	200 210 220 230 240 250 260 270 280 290 300	220
455	400 410 420 430 440 450 460 470 480 490 500	460

More Rounding with Number Lines

Examine each number given. Place the number on its spot on the number line. Determine which hundred the number line is closest to by drawing an arrow. Then round the number to the closest hundred and record your answer. The first one is done for you.

Number	Draw on Number Line	Rounded to Nearest Hundred
224	0 100 200 300 400 500 600 700 800 900 1,000	200
831	0 100 200 300 400 500 600 700 800 900 1,000	800
977	0 100 200 300 400 500 600 700 800 900 1,000	1,000
160	0 100 200 300 400 500 600 700 800 900 1,000	200
550	0 100 200 300 400 500 600 700 800 900 1,000	600
720	0 100 200 300 400 500 600 700 800 900 1,000	700
603	0 100 200 300 400 500 600 700 800 900 1,000	600
390	0 100 200 300 400 500 600 700 800 900 1,000	400

Rounding and Estimation Quiz

Round the following numbers to the nearest ten.

1. 7,241 ➔ **7,240**

2. 19,506 ➔ **19,500**

3. 110,110 ➔ **110,110**

Round the following numbers to the nearest hundred.

4. 80,458 ➔ **80,460**

5. 606,008 ➔ **606,010**

6. 5,555 ➔ **5,560**

Answer the following questions below.

7. Gail is thinking of a number that rounds to 900. Which of the following is not a number that Gail could be thinking of?
   A. 850
   B. 845
   C. 945
   D. 915

8. Derek rode his motorcycle 14,975 miles last year. About how many miles did Derek ride? Round to the nearest hundred.
   A. 15,000
   B. 14,900
   C. 14,950
   D. 15,100

9. Timber Elementary made 9,004 cookies for the district bake sale. What is the number of cookies the school made rounded to the nearest ten?
   A. 10,000
   B. 9,000
   C. 8,990
   D. 9,010

10. Mark found 96 shells on the beach and Matthew found 115. Estimate the number of shells both boys found.
    A. 190
    B. 220
    C. 205
    D. 210

Assessment

For numbers 1–4, listen as your teacher calls out numbers. Write the numbers in standard form.

1.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	Answers	will	vary.		

3.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	Answers	will	vary.		

2.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	Answers	will	vary.		

4.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	Answers	will	vary.		

For numbers 5–8, look at the number your teacher is displaying. Write the number in standard form.

5.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	Answers	will	vary.		

7.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	Answers	will	vary.		

6.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	Answers	will	vary.		

8.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	Answers	will	vary.		

Read each problem below and solve.

9. What is the place value of the underlined digit?

6̲7,093

A. Hundreds
B. Tens
C. Thousands
D. Ten thousands

10. Blaire is thinking of a number with a 5 in the hundreds place. Which of these numbers could be Blaire's number?
A. 67,905
B. 55,194
C. 505,455
D. 65,590

11. Compare the numbers below. Write the correct symbol.

87,903   **>**   87,704

12. A school district has 56,488 students in the district. What is that number in word form?
A. Fifty-six thousand, forty eight-eight.
B. Fifty-six thousand, four hundred eighty-eight
C. Fix-six hundred thousand, four hundred eighty-eight
D. Fix-six million thousand, four hundred eighty-eight

13. Order the numbers from greatest to least.

345,609   246,699   346,906   245,906

346,906 , **345,609** , **246,699** , **245,906**

14. What place value is used to show that 8,909 is less than 8,919?

A. Thousands

B. Hundreds

C. Ones

D. Tens

15. Gina is thinking of a number that has a 7 in the hundred thousands and tens place. Which of the following could be Gina's number?

A. 707,606

B. 777,007

C. 743,077

D. 324,077

16. Round this number to the nearest hundred.

78,965 → _____79,000_____

17. Mark is thinking of a number that rounds to 500. Which of the following could not be Mark's number.

A. 456

B. 508

C. 445

D. 497

18. The milk factory produced 130,000 gallons of milk. What is another way to say 130,000?

A. 130 hundreds

B. 13 thousands

C. 13 ten thousands

D. 1,300 tens

19. George counted 604 bikes at a race. What is the same as 604?
   A. 600 hundreds and 4 tens
   B. 60 tens and 4 ones
   C. 600 tens and 4 ones
   D. 6 hundreds and 4 tens

20. Examine the number below. Draw the number in base ten form and write the number in all forms below.

184,303

Expanded Form:
100,000 + 80,000 + 4,000 + 300 + 3

Expanded Notation:
1 × 100,000 + 8 × 10,000 + 4 × 1,000 + 300 + 3

Word Form:
One hundred eighty-four thousand three hundred three

Round the number to the nearest ten:
184,300

Round the number to the nearest hundred:
184,300

Stacie counted the shopping carts at her grocery store and counted 650. Which is the same as 650?
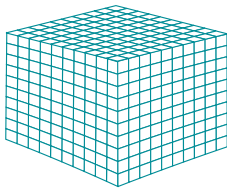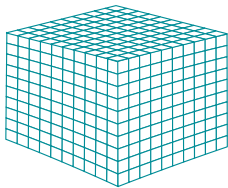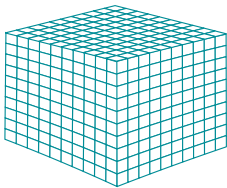
A. 65 ones
B. 6 hundreds and 5 ones
C. 65 tens
D. 5 hundreds and 10 tens

Which of the following is not another way to represent the number below?
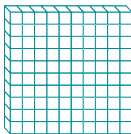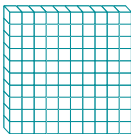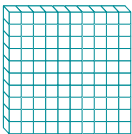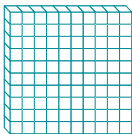
A. 340 tens
B. 34 hundreds
C. 340 hundreds
D. 3,400 ones

A farmer sorts apples into bundles of 10 to take to the market. If he has 4,560 apples, how many bundles of 10 will he make?

A. 4
B. 456
C. 45
D. 4,560

A peppermint factory sells peppermints in packs of 100. If the factory makes 900,000 peppermints, how many packs will need to be made?
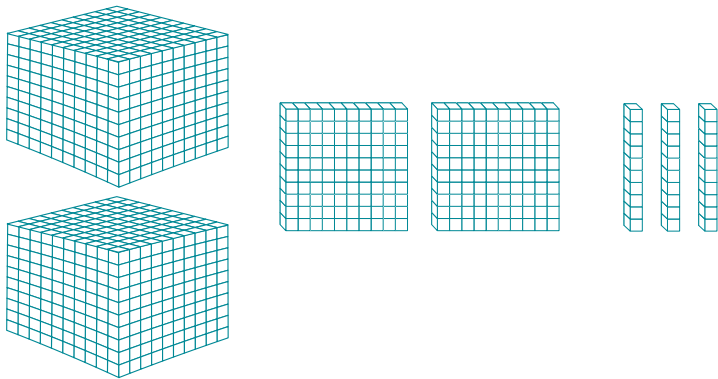
A. 90
B. 90,000
C. 9,000
D. 900

How many tens represent the number below?

A. 2,230 tens
B. 223 tens
C. 220 tens
D. 222 tens

Markers are sorted into bundles of hundreds at the factory. If there are 8,900 markers, how many bundles of 100 will be made?

A. 9
B. 8
C. 890
D. 89

Randy counted baskets at the store. He counted 430. What is another way to say 430?

Answers will vary.

A farmer sorts strawberries into bundles of 100 to take to the market. If he has 12,700 strawberries, how many bundles of hundreds will he make?

127 bundles of strawberries

How many tens represent 35,480?

3,548 tens

A chocolate factory sells chocolate pieces in packs of 1,000. If the factory makes 85,000 chocolate pieces, how many packs will need to be made?

85 packs of chocolate

Pencils are sorted in bundles of a hundred at the factory. If there are 451,200 pencils, how many bundles of 100 will be made?

4,512 bundles of pencils

How many thousands represent 467,000?

467 thousands

What is the place value of the underlined digit?

9<u>4</u>5,302

ten thousands

Mark is thinking of a number with an 8 in the ten thousands place. What could be Mark's number?

Sample answer: 83,231

The school district has 109,082 students. What is the word form of 109,082?

one hundred nine thousand eighty-two

Orange-A-Licious factory produced 155,000 gallons of orange juice. What is another way to say this number?

one hundred fifty-five thousand

Robert is thinking of a number that has a 3 in the hundreds place and a 2 in the thousands place. What could be Robert's number?

Sample answer: 12,345

What is 78,909 in expanded notation?

$7 \times 10{,}000 + 8 \times 1{,}000 + 9 \times 100 + 9$

654,789　　　645,897　　　654,978　　　645,798

2　　　　　3　　　　　1　　　　　4

Greatest to Least Cards, Set 1

98,707	97,808	97,880	98,770
2	**4**	**3**	**1**

101,765   110,765   101,675   110,567

3   **1**   **4**   **2**

87,909   87,990   87,009   87,999

3   2   4   1

Which of the following statements is true?

A. 123,111 > 132,101, because 111 > 101
B. 132,100 < 123,001, because 2,000 < 3,000.
C. 132,101 > 132,100, because 1 > 0.
D. 123,001 = 123,111, because1 = 1.

Which of the following statements is not true?

A. 777,777 > 777,770, because 7 > 0.
B. 707,770 > 770,077, because 770 > 77.
C. 707,770 < 777,777, because 7,770 < 77,777
D. 777,770 > 770,007 because 77,000 > 70,000

Which of the following statements is true?

A. 56,897 > 56,987, because 97 > 87.
B. 56,987 < 56,778 because 8 > 7.
C. 56,987 < 57,897, because 56,000 < 57,000.
D. 56,987 > 57,897, because 987 > 897.

Statement Card

Which of the following statements is not true?

A. 46,006 > 46,000, because 6 > 0.
B. 46,000 > 45,606, because 46,000 > 45,000
C. 45,606 = 46,006, because 6 = 6.
D. 45,606 < 45,660, because 606 < 660.

Riley is thinking of a number that rounds to 1,000. Which of the following could not be Riley's number?

A. 999
B. 1,029
C. 1,001
D. 949

Theresa is thinking of a number that rounds to 1,250. Which of the following could be Theresa's number?

A. 1,243
B. 1,259
C. 1,252
D. 1,255

What is 549 rounded to the nearest hundred?
What is 549 rounded to the nearest ten?

A. 500 and 550
B. 600 and 550
C. 600 and 500
D. 500 and 540

Madison is thinking of a number that rounds to 700. Which of the following could not be Madison's number?

A. 659
B. 704
C. 749
D. 645

Theresa is thinking of a number that rounds to 1,400. Which of the following could be Theresa's number?

A. 1,329
B. 1,410
C. 1,450
D. 1,340

What is 14,892 rounded to the nearest hundred? What is 14,892 rounded to the nearest ten?

A. 14,900 and 14,900
B. 14,800 and 14,900
C. 14,900 and 14,890
D. 15,000 and 14,800

Estimate the sum.
453 + 298 = ?
(Round to the nearest hundred.)

Answer: _____800_____

Estimate the difference.
941 – 723 = ?
(Round to the nearest ten.)

Answer: ___200___

Jake had 363 stamps.
Aubrey had 145 stamps.
Which number sentence shows
the most reasonable estimate
for the difference in the number
of stamps?

A. 363 – 145 = 218
B. 350 – 100 = 250
C. 350 – 150 = 200
D. 400 – 150 = 250

Bill had 459 pieces of paper. He bought a new pack of paper that had 175 pieces. If Bill rounded to the nearest ten, about how many pieces of paper does he have?

Answer: __640 pieces of paper__

Vicki found 72 seashells on the beach. Mark found 94 seashells. About how many seashells did they find in all?

Answer: __160 seashells__

Randy wanted to find the difference between 732 and 386. Randy rounded the numbers and estimated the difference to be 800 – 400 = 400. Is he correct? Why or why not?

Answer: Sample answer:
No, Randy should have rounded 732 to 700.

The expanded notation of a number is shown below.

$$(2 \times 100{,}000) + (9 \times 1{,}000) + (8 \times 10)$$
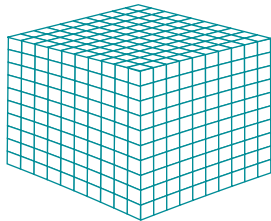
What is the number in standard form?

A. 200,908
B. 20,980
C. 209,080
D. 209,008

Which choice below does not describe the model below?

A. 1 × 1,000
B. 100 × 10
C. 10,000 × 1

A group of numbers are shown below.

6,078   6,708   6,780   6,807

Which statement is true?

A. 6,078 > 6,780, because 8 > 0
B. 6,708 < 6,780, because 8 < 80
C. 6,780 > 6,807, because 80 > 7
D. 6,807 < 6,078, because 7 < 78

Which statement about the number 9,779 is true?

A. There is a 7 in the tens place so $7 \times 10 = 70$

B. There is a 7 in the hundreds place so $7 \times 100 = 70$.

C. There is a 9 in the thousands place so
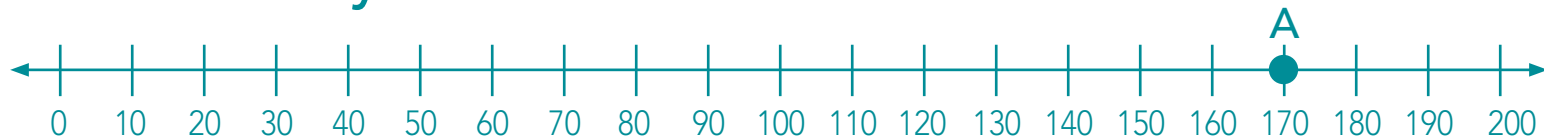$9 \times 100 = 9{,}000$

D. There is a 9 in ones place so $9 \times 1 = 1$

Write the number below in standard form.
Write the answer.

Six hundred thousand,
eight hundred eight

600,808

The Hank family went on a road trip. The number line below represents how many miles they traveled on their first day.

A

| | | | | | | | | | | | | | | | | | | | |
0   10   20   30   40   50   60   70   80   90   100   110   120   130   140   150   160   170   180   190   200

About how many miles did the family drive on their first day?

A. 200, because point A is more than halfway between 100 and 200.

B. 100, because point A is less halfway between 100 and 200.
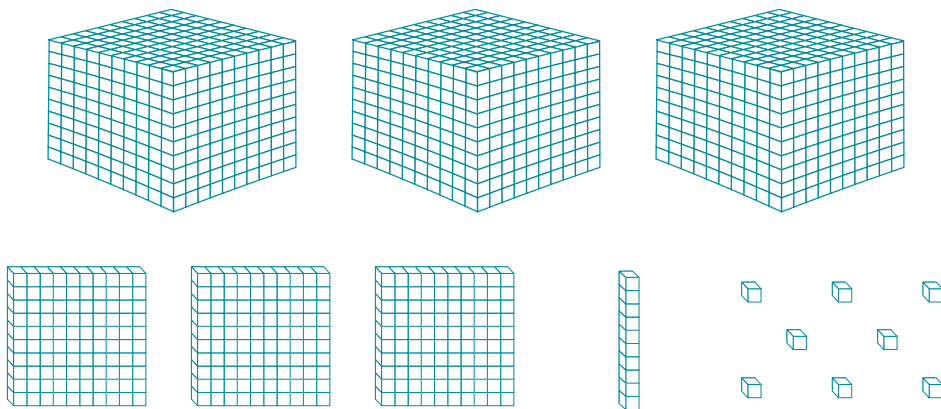
The population of Borne, Texas is 12,384 people.

What is this number rounded to the nearest hundred?

Write the answer.

12,400

Write the number below in word form.

Write the answer.

three thousand three hundred and eighteen

The number of people in a city has an 8 in the hundreds place and a 7 in the ten thousands place. Which of the following could be the number of people in the city?

A. 807,000
B. 87,000
C. 870,807
D. 887,778

The table below shows the number of tire stores in five Texas towns.

Town	Borne	Bryan	Hill	Galveston	Lubbock
# of Tire Stores	15	28	12	35	60

What is the best estimate of total number of tire stores in Galveston, Borne, and Bryan?

A. 80
B. 100
C. 90
D. 70

Order the numbers below from least to greatest.

90,006   101,076   90,060   101,067

90,006
90,060
101, 067
101, 076

What of the following is not a way to say the number below.

768,000

A. 768 thousands
B. 7,680 ones
C. 76,800 tens
D. 7,680 hundreds