

Grade 4 · Place Value to One Million · Worksheet Answer Key

Common Core 4.NBT.A.1, 4.NBT.A.2 · mathovore.fr

Every problem on the place value worksheet is solved here step by step. Check each answer, then reread the step where a number was found. The figures show the place-value chart, so you can see why each digit has its value.

Grade 4 Common Core: 4.NBT.A.1 · 4.NBT.A.2

Problem 1: Value of a digit

The 8 is in the hundreds place. Its value is $8 \times 100 = 800$.

Thousands period			Ones period		
Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
		4	8	6	2
		4,000	800	60	2

The 8 is in the hundreds place, so its value is 800.

The value of the digit 8 is **800**.

Problem 2: Value in a larger number

Count the places from the right: 0 is ones, 7 is tens, 1 is hundreds, 2 is thousands, 5 is ten thousands. The 5 is in the ten thousands place.

$$5 \times 10,000 = 50,000$$

The value of the 5 is **50,000**.

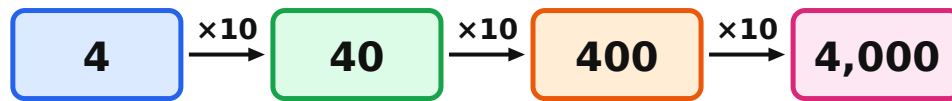
Problem 3: Ten times as much

Think of the multiplication $? \times 10 = 30$. Since $3 \times 10 = 30$, the number is 3. Check with division: $30 \div 10 = 3$.

The number is **3**.

Problem 4: Multiply by ten

$4 \times 10 = 40$ and $40 \times 10 = 400$. Check: $400 \times 10 = 4,000$, which matches the last box.



The completed chain: 4, 40, 400, 4,000.

The missing numbers are **40** and **400**.

Problem 5: Two sevens

The left 7 is in the thousands place: $7 \times 1,000 = 7,000$. The right 7 is in the hundreds place: $7 \times 100 = 700$.

$$700 \times 10 = 7,000$$

The left 7 is **10 times** as much as the right 7.

Problem 6: Write the number name

Read the thousands period: 4 thousand. Then the ones period: 305 is three hundred five. There are 0 tens, so no tens word is used.

four thousand three hundred five

Problem 7: Write the numeral

Twenty-six thousand is 26 in the thousands period. Nine hundred forty is 940 in the ones period. Join them with a comma.

26,940

Problem 8: Expanded form

7 is in the thousands place: 7,000. 2 is in the hundreds place: 200. 4 is in the tens place: 40. 8 is in the ones place: 8.

$$7,000 + 200 + 40 + 8$$

Problem 9: From expanded form

Put each value in its place: 4 ten thousands, 3 thousands, 5 hundreds, 0 tens, 6 ones. The tens place has no value in the sum, so it holds a 0.

$$40,000 + 3,000 + 500 + 6 = 43,506$$

The numeral is **43,506**.

Problem 10: Compare four-digit numbers

The thousands digits match (5), and the hundreds digits match (2). In the tens place, 8 is greater than 4.

$$5,284 > 5,248$$

Problem 11: Compare five-digit numbers

Line up the places. The ten thousands and thousands digits match. In the hundreds place, 0 is less than 1.

Thousands period			Ones period		
Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	6	3	0	1	9
	6	3	1	0	9

The first different place is the hundreds place: 0 and 1.

$$63,019 < 63,109$$

Problem 12: Different lengths

124,500 has 6 digits and starts with a nonzero digit. 99,999 has only 5 digits. The number with more digits is greater.

$$124,500 > 99,999$$

Problem 13: Order from least to greatest

4,523 has only 4 digits, so it is the least. The other three have 5 digits and share 45 on the left. Compare the hundreds digits: 2, 3, 2. The two numbers with 2 hundreds are 45,230 and 45,203. Compare their tens: 3 is greater than 0, so 45,203 is less than 45,230. 45,320 has 3 hundreds, so it is greatest.

4,523; 45,203; 45,230; 45,320

Problem 14: Count the disks

Read the number of disks in each column: 2 ten thousands, 6 thousands, 0 hundreds, 4 tens, 3 ones. Value: $20,000 + 6,000 + 0 + 40 + 3 = 26,043$.

Thousands period			Ones period		
Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	2	6	0	4	3

20,000 6,000 0 40 3

The same number in a place-value chart.

Numeral: **26,043**. Name: **twenty-six thousand forty-three**.

Problem 15: Four sixes

From left to right the 6s are in the thousands, hundreds, tens, and ones places.

Thousands period			Ones period		
Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
		6	6	6	6

6,000 600 60 6

Values of the four 6s: 6,000; 600; 60; 6.

The values are **6,000; 600; 60; and 6**. Each is 10 times the one to its right.

Problem 16: Ten hundred thousands

The 1 in 1,000,000 is in the millions place. The hundred thousands place is one place to its right, so the 1 is 10 times as much as 1 hundred thousand.

$$10 \times 100,000 = 1,000,000$$

Millions	Thousands period			Ones period		
Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
1	0	0	0	0	0	0
1,000,000	0	0	0	0	0	0

One million is ten hundred thousands.

10 hundred thousands make 1,000,000.

Problem 17: Change a digit

The 8 is in the thousands place. A 9 in that place is worth 9,000 instead of 8,000. The new number is 49,205.

$$49,205 - 48,205 = 1,000$$

The new number is **49,205**. It is **1,000** greater.

Problem 18: Attendance

Both numbers have 5 digits. The ten thousands, thousands, and hundreds digits match (5, 2, 3). In the tens place, 8 is greater than 0.

$$52,380 > 52,308$$

There were more fans on **Saturday**.

Problem 19: Town populations

Oak Ridge has 4 digits, so it is the least. Cedar Creek starts with 8 ten thousands, more than the 1 ten thousand in Maple Falls and Pine Hill, so it is greatest. Maple Falls and Pine Hill both start 18, so compare the hundreds: 2 hundreds is less than 4 hundreds.

Cedar Creek (81,042), Pine Hill (18,420), Maple Falls (18,240), Oak Ridge (8,924)

Problem 20: Find the mistake

Maya wrote only the leading digits and left out the zeros. The 3 is worth 300,000, the 4 is worth 40,000, and the 5 is worth 5. The thousands, hundreds, and tens places are empty, so they need zeros.

$$300,000 + 40,000 + 5 = 340,005$$

The correct numeral is **340,005**.

Problem 21: True or false

In 45,000 the 4 is in the ten thousands place: $4 \times 10,000 = 40,000$. In 4,500 the 4 is in the thousands place: $4 \times 1,000 = 4,000$.

$$4,000 \times 10 = 40,000$$

Jamal is **correct**.

Problem 22: Greatest and least

For the greatest number, put the greatest digit in the greatest place: 8, 5, 3, 2, 0 gives 85,320. For the least number, the 0 cannot go first, because then the number would have only 4 digits. Put the least nonzero digit, 2, first, then 0, 3, 5, 8.

Greatest: **85,320**. Least: **20,358**.