LESSON MAKER PRO

Place Value Power

See how each place changes a digit's value.

GRADE 4 · 4.NBT.A.1

CCSS.Math.Content.4.NBT.A.1 "Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division."

NAME _____ DATE _____

THE PLACE VALUE RULE

When the same digit moves one place to the left, its value becomes 10 times greater. When it moves one place to the right, its value becomes one tenth as much.

WORKED EXAMPLE

How many times as great is 8,000 as 800?

1. Write the division: 8,000 / 800.
2. Rewrite in hundreds: 80 hundreds / 8 hundreds.
3. Divide: 80 / 8 = 10.

Answer: 8,000 is 10 times as great as 800.

PRACTICE 6 problems

1 Complete: 5,000 / 500 = ___.

ANSWER _____

2 In 44,000, compare the 4 in the ten-thousands place with the 4 in the thousands place. The first 4 has a value ___ times as great as the second 4.

ANSWER _____

3 Complete: 70,000 = ___ x 7,000.

ANSWER _____

4 How many times as great is 9,000 as 900?

ANSWER _____

5 The digit 3 has values of 30,000 and 3,000 in two different numbers. Which value is greater, and how many times as great is it?

ANSWER _____

6 In 222,000, how many times as great is the value of the leftmost 2 as the value of the rightmost 2?

ANSWER _____

APPLY IT Show your work

1 During a school esports score challenge, Jalen earned 60,000 points. Priya earned 6,000 points. How many times as many points did Jalen earn?

WORK SPACE

ANSWER _____

2 A science museum video had 900,000 views. Another video had 90,000 views. How many times as many views did the first video have?

WORK SPACE

ANSWER _____

CHALLENGE One step up

In 7,777,000, compare the value of the 7 in the millions place with the value of the 7 in the thousands place. How many times as great is the first value? Explain using the place values.

WORK SPACE AND ANSWER

ANSWER KEY

Place Value Power

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Complete: 5,000 / 500 = ___.	**10**
2	In 44,000, compare the 4 in the ten-thousands place with the 4 in the thousands place. The first 4 has a value ___ times as great as the second 4.	**10**
3	Complete: 70,000 = ___ x 7,000.	**10**
4	How many times as great is 9,000 as 900?	**10**
5	The digit 3 has values of 30,000 and 3,000 in two different numbers. Which value is greater, and how many times as great is it?	**30,000 is greater. It is 10 times as great as 3,000.**
6	In 222,000, how many times as great is the value of the leftmost 2 as the value of the rightmost 2?	**100**

PART 2 · APPLY IT

1. **10 times as many points** Compare 60,000 to 6,000. The 6 in 60,000 is one place to the left of the 6 in 6,000, so its value is 10 times as great.
2. **10 times as many views** Divide 900,000 by 90,000. The 9 in 900,000 is one place to the left of the 9 in 90,000, so the quotient is 10.

CHALLENGE

The 7 in the millions place has a value of 7,000,000. The 7 in the thousands place has a value of 7,000. Since 7,000,000 / 7,000 = 1,000, the first value is 1,000 times as great.

Accept numerical answers or equivalent wording such as “ten times as great.” For the challenge, accept 1,000 times with a correct comparison of 7,000,000 and 7,000.