

Place Value Detectives

Use digit values to compare numbers with confidence.

GRADE 4 • 4.NR.1.3

4.NR.1.3 "Use place value reasoning to represent, compare, and order multi-digit numbers, using $>$, $=$, and $<$ symbols to record the results of comparisons."

NAME _____

DATE _____

COMPARE BY PLACE

A digit's value depends on its place in a number. To compare two numbers, start at the left and compare each place until you find different digits. The number with the greater digit in that place is greater.

WORKED EXAMPLE

Compare 731,406 and 713,460.

Write $>$, $=$, or $<$.

1. Both numbers have 7 in the hundred-thousands place.
2. Compare the ten-thousands digits: 3 is greater than 1.
3. So 731,406 is greater than 713,460.

Answer: 731,406 $>$ 713,460

PRACTICE 6 problems

1 Write 608,042 in expanded form.

ANSWER _____

2 Write this number in standard form:

$$900,000 + 20,000 + 700 + 6$$

ANSWER _____

3 Fill in the blank with $>$, $=$, or $<$: 475,090 ____
475,900

ANSWER _____

4 Fill in the blank with $>$, $=$, or $<$: 820,015 ____
 $800,000 + 20,000 + 10 + 5$

ANSWER _____

5 Fill in the blank with $>$, $=$, or $<$: 661,204 ____
659,999

ANSWER _____

6 Order these numbers from least to greatest:
90,450; 90,405; 90,540

ANSWER _____

APPLY IT Show your work

- 1** In a game tournament, Jada earned 156,780 points. Marcus earned 156,708 points. Who earned more points? Write a comparison using $>$, $=$, or $<$.

WORK SPACE

ANSWER _____

- 2** A wildlife center counted 42,305 visitors in April and 42,350 visitors in May. Which month had fewer visitors? Write a comparison using $>$, $=$, or $<$.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Use each digit 7, 0, 4, 9, 2, and 5 exactly once. Make the greatest six-digit number and the least six-digit number. Then compare them using $>$, $=$, or $<$.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Write 608,042 in expanded form.	600,000 + 8,000 + 40 + 2
2	Write this number in standard form: 900,000 + 20,000 + 700 + 6	920,706
3	Fill in the blank with >, =, or <: 475,090 ____ 475,900	<
4	Fill in the blank with >, =, or <: 820,015 ____ 800,000 + 20,000 + 10 + 5	=
5	Fill in the blank with >, =, or <: 661,204 ____ 659,999	>
6	Order these numbers from least to greatest: 90,450; 90,405; 90,540	90,405; 90,450; 90,540

PART 2 • APPLY IT

1. **Jada earned more points. 156,780 > 156,708** Both scores match through the hundreds place. In the tens place, 8 is greater than 0, so Jada's score is greater.
2. **April had fewer visitors. 42,305 < 42,350** Both numbers match through the hundreds place. In the tens place, 0 is less than 5, so April has fewer visitors.

CHALLENGE

975,420 > 204,579

Accept expanded form with or without commas. For comparison problems, accept the correct symbol alone when the prompt asks students to fill in a blank.