Compare and Order Numbers

(I Can) use number lines and symbols to compare and order numbers.

Florida's B.E.S.T.

- Number Sense & Operations 4.NSO.1.3
- Mathematical Thinking & Reasoning MTR 1.1, MTR 3.1, MTR 4.1



UNLOCK the Problem

Grand Canyon National Park in Arizona had 651,028 visitors in May 2018 and 665,188 visitors in May 2019. In which year did the park have more visitors during the month of May?

- How many visitors were there in May 2018?
- How many visitors were there in May 2019?

Example 1 Use a place-value chart.

You can use a place-value chart to line up the digits by place value. Line up the ones with the ones, the tens with the tens, and so on. Compare 651,028 and 665,188.

Write 651,028 and 665,188 in the place-value chart below.

THOUSANDS			ONES		
Hundreds	Tens	Ones	Hundreds	Tens	Ones

Start at the left. Compare the digits in each place-value position until the digits differ.

STEP 1 Compare the hundred thousands.

651,028

665,188

6 hundred thousands (6 hundred thousands \triangle Write <, >, or =.

The digits in the hundred thousands place are the same.

STEP 2 Compare the ten thousands.

651,028

665,188

5 ten thousands (6 ten thousands \triangle Write <, >, or =.

5 ten thousands is less than 6 ten thousands, so 651,028 < 665,188.

Since 651,028 < 665,188, there were more visitors in May 2019 than in May 2018.

Example 2 Use a number line to order 10,408; 10,433; and 10,416 from least to greatest.

Locate and label each point on the number line. The first one is done for you.



Think: Numbers to the left are closer to 0.

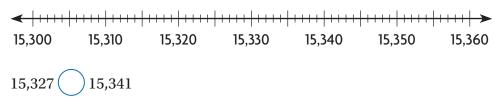
So, the numbers from least to greatest are 10,408; 10,416; and 10,433. 10,408 < 10,416 < 10,433

Share and Show

Math Board

1. Compare 15,327 and 15,341.

Write <, >, or =. Use the number line to help.



Compare. Write <, >, or =. Use a number line, if needed.

2. \$631,328 \$1,000,000

⋖ 3. 56,991 52,880

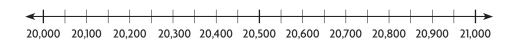
4. 708,561 629,672

- **5.** 143,062 98,643
- **⊙ 6.** Plot the numbers on the number line. Then order them from greatest to least.

Math Talk

Engage in discussions on mathematical thinking.

Why do you not start with the ones digits when comparing three multi-digit numbers?



20,620; 20,890; 20,150

On Your Own

Compare. Write <, >, or =. Use a number line, if needed.

Order from least to greatest. Use a number line, if needed.

MTR Write all of the digits that can replace each.

- 15. Minho's car has 156,261 miles on the odometer. Lucia's car has 165,002 miles on the odometer. Yakov's car has 145,834 miles on the odometer. Whose car has the most miles? Order the number of miles from least to greatest.
- **16.** At Lupita's Used Cars, the sales staff set a goal of \$25,500 in sales each week. The sales for three weeks were \$28,288; \$25,369; and \$25,876. Which total did not meet the goal?
- 17. Max said that 36,594 is less than 5,980 because 3 is less than 5. Describe Max's error and give the correct answer.

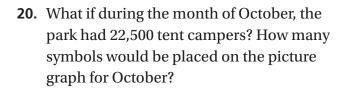
Problem Solving · Applications



Use the picture graph for Problems 18-20.

18. MTR In which month shown did Grand Canyon National Park have about 7,500 tent campers?







Grand Canyon National Park Tent Campers				
Month (2018)	Estimated Number of Campers			
June				
July				
August				
September				
Key: Each = 5,000.				

21. Compare: 643,251; 633,512; and 633,893. The answer is 633,512, what's the question?



22. Mordechai's school set a goal of collecting 12,155 cans of food each day. In the first 3 days, the school collected 12,250 cans; 10,505 cans; and 12,434 cans. Write each number in the box that tells whether or not the school met its goal.

12,250

10,505

12,434

Met the daily goal	Did not meet the daily goal

Compare and Order Numbers

Go Online Interactive Examples

Compare. Write <, >, or =. Use a number line, if needed.

Order from least to greatest. Use a number line, if needed.

- **14.** An online newspaper had 350,080 visitors in October, 350,489 visitors in November, and 305,939 visitors in December. What is the order of the months from greatest to least number of visitors?
- 15. The total land area in square miles of each of three states is shown below.

Colorado: 103,718 New Mexico: 121,356 Arizona: 113,635

What is the order of the states from least to

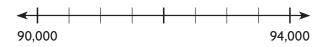
greatest total land area?

16. WRITE Math Suppose the leftmost digits of two numbers are 8 and 3.

Can you tell which number is greater? Explain.

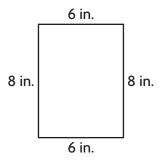
Lesson Check

- 17. At the yearly fund-raising drive, the nonprofit company's goal was to raise \$55,500 each day. After three days, it had raised \$55,053; \$56,482; and \$55,593. Which amount was less than the daily goal?
- **18.** Plot these numbers on a number line. Then, list these numbers in order from greatest to least: 90,048; 93,405; 90,543



Spiral Review

- **19.** Write a fraction that is less than $\frac{5}{6}$ and has a denominator of 8.
- **20.** What is the perimeter in inches of the rectangle below?



- **21.** A website had 826,140 hits last month. What **22.** Write 680,705 in expanded form. is the value of the 8 in 826,140?