**Essential Question** How can you compare and order numbers?

### Unlock the Problem



Grand Canyon National Park in Arizona had 651,028 visitors in July 2008 and 665,188 visitors in July 2009. In which year did the park have more visitors during the month of July?



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

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 Write <, >, or =.

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

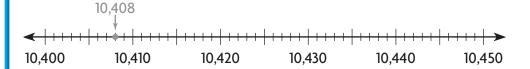
Since 651,028 < 665,188, there were more visitors in July 2009 than in July 2008.

• How many visitors were there in July 2008?

• How many visitors were there in July 2009?

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.



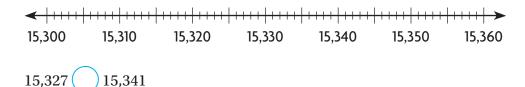
Think: Numbers to the left are closer to 0.

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

## **Share and Show**



1. Compare 15,327 and 15,341. Write <, >, or =. Use the number line to help.



Compare. Write <, >, or =.

- **2.** \$631,328 \$640,009
- **4.** 708,561 629,672

Order from greatest to least.

**6.** 20,650; 21,150; 20,890

- **3.** 56,991 52,880
  - **5.** 143,062 98,643

Math Talk

#### MATHEMATICAL PRACTICES 2

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

### On Your Own

Compare. Write <, >, or =.

- **7.** \$2,212 \$2,600
- **9.** \$524,116 \$61,090

- **8**. 88,304 88,304
- **10.** 751,272 851,002

Order from least to greatest.

**11.** 41,090; 41,190; 40,009

**12.** 910,763; 912,005; 95,408

MATHEMATICAL 10 Identify Relationships Algebra Write all of the digits that can replace each .

**13.** 567 < 5 5 < 582

- **14.** 464,545 > 4 3,535 > 443,550
- **15.** Casey's car has 156,261 miles on the odometer. Casey's car has 165,002 miles on the odometer. Mike'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.** GODEEPER At Monica'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. What's the Error? 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**



Month (2008)

June

July

August

September

Use the picture graph for 18-20.

- **18.** MATHEMATICAL 4 Use Graphs In which month shown did Grand Canyon National Park have about 7,500 tent campers?
- **19.** GODEEPER How many more campers were there in July and August than in June and September?
- **20.** What if during the month of October, the park had 22,500 tent campers? How many symbols would be placed on the pictograph for October?



21. THINK SMARTER What's the Question?

Compare: 643,251; 633,512; and 633,893. The answer is 633,512.

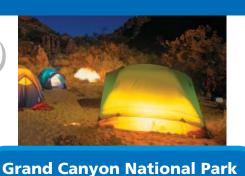
22. THINK SMARTER TO Zachary's school set a goal of collecting
12,155 cans of food each day. In the first 3 days the school
collected 12,250 cans; 10,505 cans; and 12,434 cans. Write
each number in the box that tells whether or not the
school met its goal.

12,434

10,505

12,250

Met the daily goal	Did not meet the daily goal



**Tent Campers** 

Key: Each f = 5,000.

**Estimated Number of Campers** 

# Practice and Homework Lesson 1.3

### **Compare and Order Numbers**

Compare. Write <, >, or =.

- **1.** 3,273 < 3,279
- **2.** \$1,323 \$1,400
- **3.** 52,692 52,692

- **4.** \$413,005 \$62,910
- **5.** 382,144 382,144
- **6.** 157,932 200,013

- **7.** 401,322 \( \) 410,322
- **8.** 989,063 980,639
- **9.** 258,766 258,596

Order from least to greatest.

**10.** 23,710; 23,751; 23,715

**11.** 52,701; 54,025; 5,206

**12.** 465,321; 456,321; 456,231

**13.** \$330,820; \$329,854; \$303,962

# **Problem Solving**



- **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?

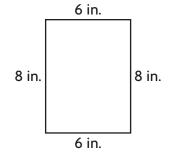
**16. WRITE** Math Suppose the leftmost digits of two numbers are 8 and 3. Can you tell which number is greater? Explain.

### Lesson Check (4.NBT.A.2)

- 1. 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?
- **2.** List these numbers in order from greatest to least: 90,048; 93,405; 90,543

### Spiral Review (Reviews 3.NF.A.3d, 3.MD.D.8, 4.NBT.A.1, 4.NBT.A.2)

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



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

