Unit 4, Lesson 13

# Order Multi-Digit Numbers

Let's put some multi-digit numbers in order.

Warm-up

## True or False: Decomposed Numbers

Decide if each statement is true or false. Explain your reasoning.

- $1{,}923 = 1 + 90 + 200 + 3{,}000$

- $1{,}923 = 1{,}000 + 90 + 20 + 3$

- $19{,}203 = 10{,}000 + 9{,}000 + 200 + 3$

- $190{,}023 = 10{,}000 + 90{,}000 + 20 + 3$

Activity 1

## Ways to Compare

1. Tyler compares large numbers by looking at the first digit from the left.

   He says, "The greater the first digit, the greater the number. If the first digit is the same, then we compare the second digit."

   In each of these pairs of numbers, is the number with the greater first digit also the greater number?

   a. 985,248 and 320,097

   b. 72,050 and 64,830

   c. 320,097 and 58,978

   d. 54,000 and 587,000

   e. 58,978 and 547,612

   f. 146,001 and 1,483

2. Does Tyler's strategy work for comparing any pair of numbers? Explain your reasoning.

3. How would you compare large numbers? Describe your strategy for comparing 54,000 and 587,000.

4. Use your strategy to order these numbers from least to greatest.

   a. 87,696 847,040 84,381

   b. 63,591 630,951 63,951 631,051

Activity 2

## Video Game Scores

Mai and her friends had a video game tournament one weekend.

Here are the scores at the end of the tournament.



| player | score |
|---|---|
| Mai | 93,005 |
| Priya | 101,012 |
| Kiran | 90,298 |
| Noah | 90,056 |
| Clare | 98,032 |
| Elena | 89,100 |
| Andre | -- |

1. Rank the scores from highest to lowest. Who is in first place?

2. Andre's score was accidentally deleted but everyone agreed he is in second place. Could Andre's score be a six-digit number?

   Describe what Andre's score could be and give a couple of examples.