

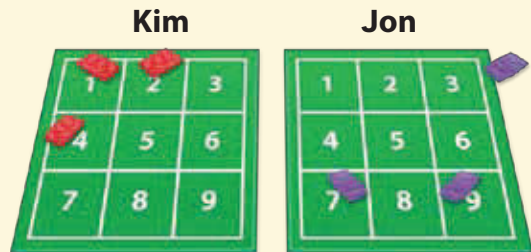


Compare Three-Digit Numbers

Use What You Know

Compare hundreds and tens.

Kim and Jon tossed beanbags at a target. What is the greatest number each person can make using the digits they landed on? Whose number has more hundreds?



a. What is the greatest number Kim can make? Why?

b. One of Jon's beanbags did not land on the board, so he can only use two numbers. What is the greatest number Jon can make? Why?

c. How many hundreds, tens, and ones are in each number?

Kim's number: ____ hundreds + ____ tens + ____ one

Jon's number: ____ hundreds + ____ tens + ____ ones

d. Compare the numbers. Which has more hundreds?



Find Out More

When you compare numbers, always start with the greatest place value. Compare the digits in each place.

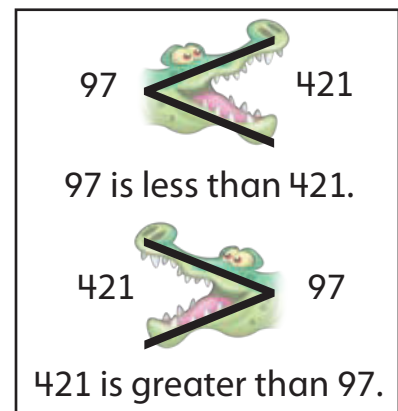
	Hundreds	Tens	Ones
Jon	0	9	7
Kim	4	2	1

4 hundreds is greater than 0 hundreds.

The number with more hundreds is greater. So 421 is greater than 97.

You can use the symbols $<$, $>$, and $=$ to compare numbers.

Think of the $<$ and $>$ as a hungry alligator's mouth that is always open to eat the greater number.



Reflect Work with a partner.

- Talk About It** Why is a three-digit number always greater than a two-digit number?

Write About It _____

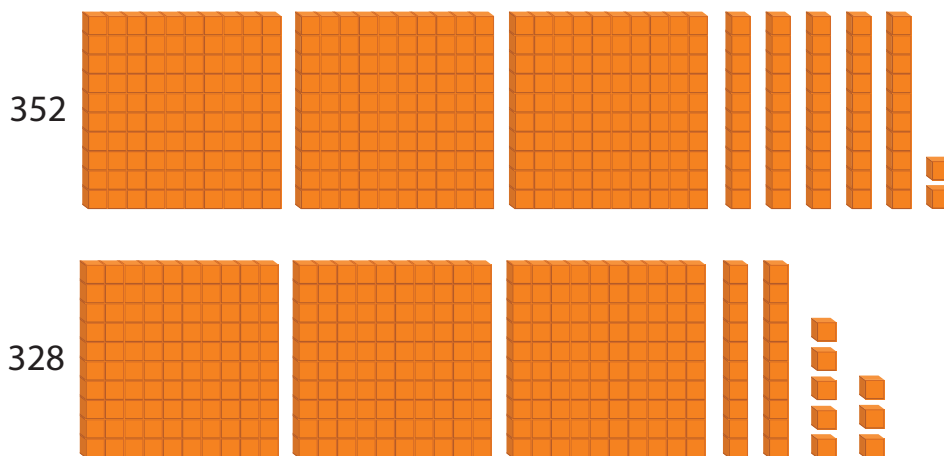
Learn About  **Ways to Compare Three-Digit Numbers**

Read the problem. Then you will compare two three-digit numbers.

There is a contest at the school fair. Students guess how many jelly beans are in a jar. Bart guesses 352 and Diego guesses 328. Which guess is the lesser number?



Picture It You can model the numbers with base-ten blocks.



Model It You can write the numbers as hundreds, tens, and ones.

$$352 = 3 \text{ hundreds} + 5 \text{ tens} + 2 \text{ ones}$$

$$328 = 3 \text{ hundreds} + 2 \text{ tens} + 8 \text{ ones}$$

▶ Connect It Understand how to compare numbers.

2 Look at the models on the previous page. Can you use the numbers in the hundreds place to decide which number is greater? Why or why not?

3 Now compare the tens. Which number has more tens?

4 Complete the number sentence to compare 352 and 328.

_____ < _____

5 Talk About It Bart says $2 < 8$, so $352 < 328$. Is this correct? Explain.

Write About It _____

▶ Try It Try another problem.

6 Write a number sentence to compare 761 and 716. Explain why the number sentence is true.



▶ Connect It Compare hundreds, tens, and ones.

7 Look at the models on the previous page. Compare the hundreds and tens. What do you notice?

8 Which place do you need to look at to compare the numbers? Why?

9 Use the numbers 467 and 463 to complete each number sentence.

_____ > _____ _____ < _____

10 Why can you write two different number sentences to compare 467 and 463?

11 Which painting has more votes? How do you know?

▶ Try It Try another problem.

12 Write $>$ or $<$ in each blank.

a. 264 _____ 462

c. 954 _____ 950

e. 718 _____ 788

b. 372 _____ 379

d. 876 _____ 867

f. 653 _____ 553

Comparing Three-Digit Numbers

Study the model below. Then solve Problems 13–15.

Example

Yen packs 250 oranges in a box. Gia packs 25 bags of oranges. She puts 10 oranges in each bag. Who packs more oranges?

Look at how you can show your work.

$$\begin{aligned} 25 \text{ bags with } 10 \text{ in each bag} &= 25 \text{ tens} \\ 25 \text{ tens} &= 250 \end{aligned}$$

$$\begin{aligned} 250 \text{ oranges in bags} \\ 250 \text{ oranges in a box} \\ 250 &= 250 \end{aligned}$$

Answer They each pack 250 oranges. Neither person packs more than the other.

- 13** Which two players have the greatest scores? Write the number of hundreds and tens in the table.

Player	Score	Hundreds	Tens
Eden	92		
Sarita	233		
Paul	213		
Chen	236		



Remember to look at the hundreds place first.

Show your work.

Answer _____

- 14** Bella biked 122 miles. Ariel biked 126 miles.
Who biked fewer miles?

Show your work.



Are you looking for the lesser or greater number?

Answer _____

- 15** Jill and Iman each write a three-digit number.

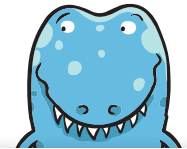
Jill's number: 305

Iman's number: 3 hundreds 5 tens

Which number sentence compares their numbers correctly?

- A** $305 < 305$
- B** $305 = 305$
- C** $350 > 305$
- D** $350 < 305$

Dan chose **B** as the answer. This answer is wrong.
How did Dan get his answer?



What number is the same as 3 hundreds 5 tens?

Solve the problems.

- 1** Which comparison is true? Circle all the correct answers.
- A** $431 > 427$
 - B** $540 < 5 \text{ hundreds } 4 \text{ ones}$
 - C** $727 < 772$
 - D** $9 \text{ hundreds } 6 \text{ tens} < 906$
- 2** Phil has 248 trading cards. Sean has more trading cards than Phil. How many cards could Sean have? Circle all the correct answers.
- A** 239
 - B** 245
 - C** 252
 - D** 260
- 3** Choose *True* or *False* for each comparison.
- | | | |
|-----------------------|------|-------|
| a. $551 > 539$ | True | False |
| b. $924 < 889$ | True | False |
| c. $770 = 707$ | True | False |
| d. $422 < 425$ | True | False |

- 4 Write one of the numbers below in each box to make a true comparison.

308

380

390

> 386

38 tens =

< 384

- 5 Use the digits below to make the greatest three-digit number you can. Explain how you got your answer.

4

1

8

- 6 Josh wants to use the digits from Problem 5 to make the least number he can. He writes 184. Is this the least number he can make? Explain.

 **Self Check** Now you can compare three-digit numbers. Fill this in on the progress chart on page 59.