## Lesson 9: Compare Numbers on the Number Line

* Let’s compare numbers on the number line.

### Warm-up: Estimation Exploration: Hundreds

What number could this be?



1. Record an estimate that is:

| * too low
 | * about right
 | * too high
 |
| --- | --- | --- |
| * $$
 | * $$
 | * $$
 |

1. Record an estimate that is:

| * too low
 | * about right
 | * too high
 |
| --- | --- | --- |
| * $$
 | * $$
 | * $$
 |

### 9.1: Compare Comparisons

Each student compared 371 and 317, but represented their thinking in different ways.

**Diego**





* I see 3 hundreds for each number.
* 317 only has 1 ten, but 371 has 7 tens.
* $371>317$

**Clare**

* Each has 3 hundreds.
* 371 has 7 tens, but 317 only has 1 ten.
* $317<371$

**Jada**



* I can see that 371 is farther to the right on my number line, so I know it is greater than 317.
* $371>317$
1. What is the same and different about these students’ representations?
* Discuss with a partner.
1. Try Jada’s way.
* Estimate the location of 483 and 443 on the number line. Mark each number with a point. Label the point with the number it represents.
* 
1. Use $>$, $=$, or $<$ to compare 483 and 443.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

### 9.2: Compare in Different Ways

1. Locate and label 420 and 590 on the number line.
* 
* Use $<$, $>$, and $=$ to compare 420 and 590.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. Estimate the location of 378 and 387 on the number line. Mark each number with a point. Label the point with the number it represents.
* 
* Use $<$, $>$, and $=$ to compare 378 and 387.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. Diego and Jada compared 2 numbers. Use their work to figure out what numbers they compared. Then use $<$, $>$, and $=$ to compare the numbers.
* 
* 
* 
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. Which representation was most helpful to compare the numbers? Why?



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