

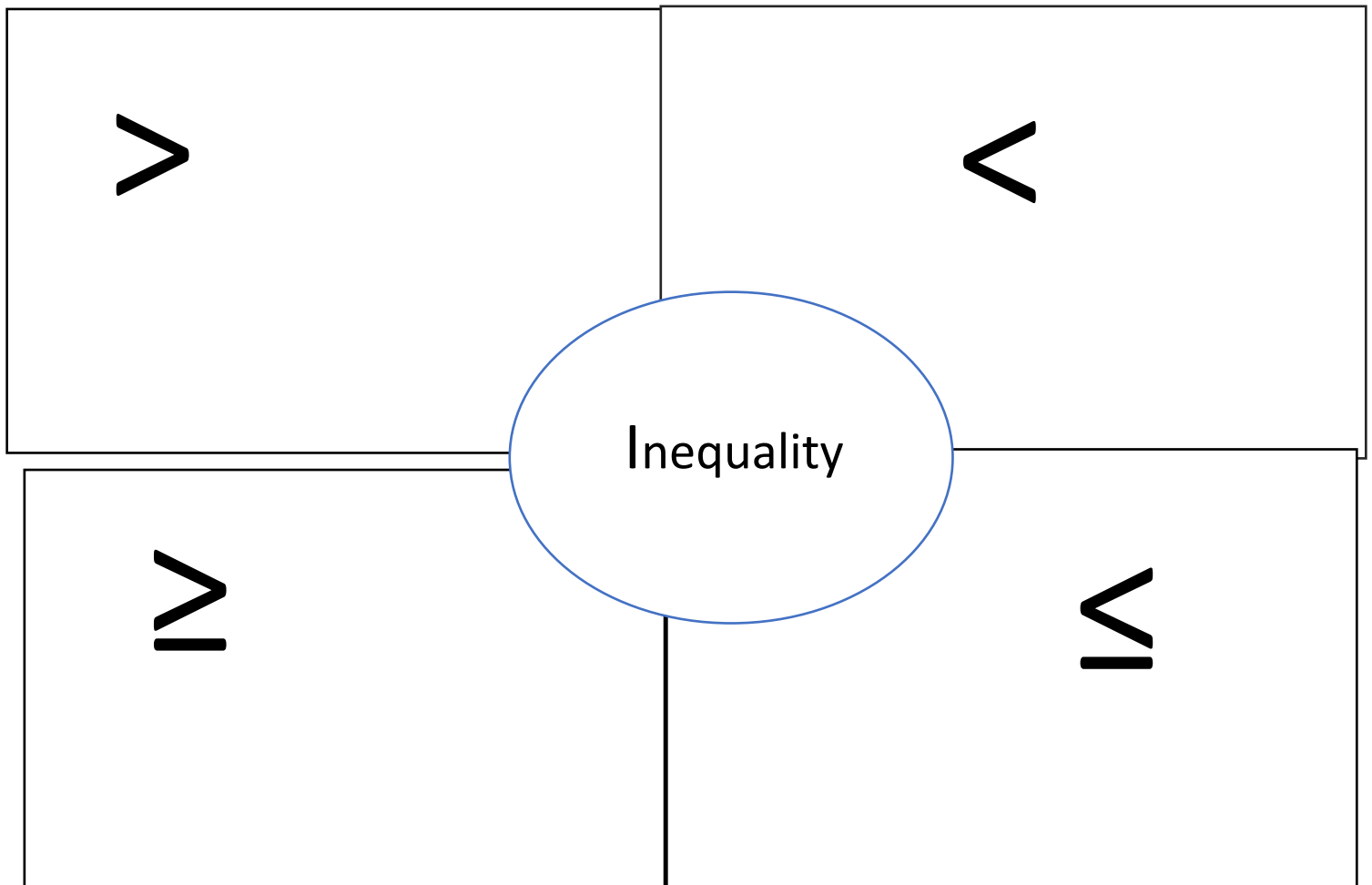
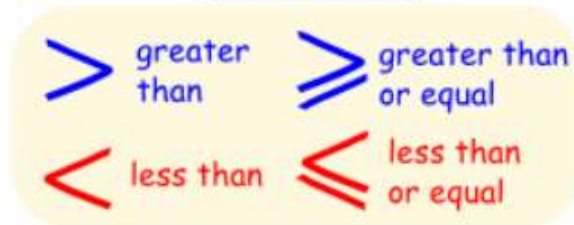
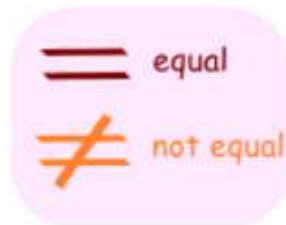
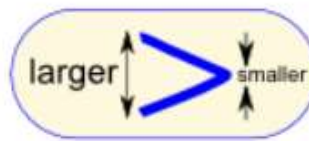
Try Now (01)

What is an inequality?

An inequality has infinitely many solutions.

What does infinitely mean?

Equality and Inequality



Model

Example #1

a. "Your friend is *more than 3 minutes late.*"

-3 -2 -1 0 1 2 3 4 5 6

- What do you notice about the numbers that you circled?

- Is the number 3 included? Why or why not?

- Write four other numbers that make the statement true.

_____, _____, _____, and _____.

b. "The temperature is *at most 2 degrees.*"

-5 -4 -3 -2 -1 0 1 2 3 4

- What do you notice about the numbers that you circled?

- Can the temperature be exactly 2 degrees? Explain.

- Write four other numbers that make the statement true.

_____, _____, _____, and _____.

c. "You need *at least 4 pieces of paper for your math homework.*"

-3 -2 -1 0 1 2 3 4 5 6

- What do you notice about the numbers that you circled?

- Can you have exactly 4 pieces of paper? Explain.

- Write four other numbers that make the statement true.

_____, _____, _____, and _____.

d. "After playing a video game for 20 minutes, you have *fewer than* 6 points."

-2 -1 0 1 2 3 4 5 6 7

- What do you notice about the numbers that you circled?

- Is the number 6 included? Why or why not?

- Write four other numbers that make the statement true.

_____, _____, _____, _____

Example #2

Write the following statements as an inequality.

- a) **Your friend is *more than* 3 minutes late.**

- b) **The temperature is *at most* 2 degrees.**

- c) **You need *at least* 4 pieces of paper for your math homework.**

- d) **After playing a video game for 20 minutes, you have *fewer than* 6 points.**

Example #3

Jay-Z spent more than five million dollars on Beyonce's engagement ring.

- a. Write three possible values of the price of Beyonce's engagement ring.

 - b. Write an inequality to represent the price of Beyonce's ring, r .
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Example #4

Ms. Napolitano does not want to spend no more than \$15 on her lunch today.

- a) Write three possible values of the cost for Ms. Napolitano's lunch.**

- b) Write the inequality to represent the cost of Ms. Napolitano's lunch, c .**

Example #5

Ms. Napolitano said that you need to get at least an 80% on the test to receive mastery.

- a) Write three possible values that will satisfy this statement.**

- b) Write the inequality to represent the grade of the test, t .**

Example #6 Write the appropriate inequality.

<p>1. The building has more than 56 floors.</p>	<p>2. The ice cream shop allowed you to choose from 9 flavors or less.</p>
<p>3. Burger King has 45 seats.</p> <p>Explain what the inequality you wrote represents in the context of the problem.</p> <hr/> <hr/> <hr/> <hr/>	<p>4. No more than 50 students will try out for the rugby team.</p> <p>Is it possible for 51 students to try out? Explain.</p> <hr/> <hr/> <hr/> <hr/>
<p>5. The high school has 57 teachers.</p> <p>Explain what the inequality you wrote represents in the context of the problem.</p> <hr/> <hr/> <hr/>	<p>6. Torii earned at most 25 credits today.</p> <p>Is it possible that Torii earned 25 credits? Explain.</p> <hr/> <hr/> <hr/>

CFU: Which inequality below matches the following scenario: Her hair was no more than 12 inches long.

$x > 12$

$x < 12$

$x \leq 12$

$x \geq 12$

