

Name :

Date:

Day 1_ Inequality Independent Practice

Choose the word sentence as an inequality.

15 is more than a number x .

- A. $15 > x$
- B. $15 < x$
- C. $15 \geq x$
- D. $15 \leq x$

Answer:

Choose the word sentence as an inequality.

A number n is at least 10.

- A. $n > 10$
- B. $n < 10$
- C. $n \geq 10$
- D. $n \leq 10$

Answer:

The library has at least 5,000 books. Which inequality represents the number of books, b , at the library?

- A $b > 5,000$
- B $b \geq 5,000$
- C $b < 5,000$
- D $b \leq 5,000$

Answer:

Is $x > 5$ the same as $5 < x$?

Write your response below:

Practice Makes Perfect!

Example #1

a. Consider the statement “ x is a number such that $x < 2$.”

- Can the number be exactly 2? Explain.

- Circle each number that makes the statement true.

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

- Write four other numbers that make the statement true.

_____, _____, _____, and _____.

b. Consider the statement “ x is a number such that $x \geq 1$.”

- Can the number be exactly 1? Explain.

- Circle each number that makes the statement true.

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

- Write four other numbers that make the statement true.

_____, _____, _____, and _____.

Matching! Partner Practice

Match each verbal description to the inequality that matches the description. Write your initials and the number of the corresponding question in your box on the board.

1. Students In middle school must be 10 years old or older	2. Most students have less than 10 hours of homework	3. Mary ran 10 miles after school on Friday.
4. The packaging on the plant says it will blossom after 10 days	5. The playpen disclaimer reads that children must be 10 years or younger to enter.	6. The ice cream sundae cone comes with fewer than 4 toppings
7. From her 4 th birthday on, Terry received a present from her grandfather.	8. In order to donate blood, a company requires donors to be at least 4 years old.	9. A ski resort has exactly four ski slopes for skiers to use.

$x = 10$	$x > 4$	$10 > x$
$x \geq 4$	$10 \geq x$	$10 \leq x$
$x = 4$	$x > 10$	$x < 4$

Write your

answers below:

#1	#2	#3
#4	#5	#6
#7	#8	#9

Write an inequality to represent each scenario in 1-5 below.

1. On a river, you must release any fish that you catch if it measures less than 12 inches.

Answer:

Can you keep a fish that is 11.99 inches? Explain.

Write your response below:

2. In order to qualify for a prize drawing, participants in a school fundraiser must obtain at least 10 sponsors.

Answer:

Explain how the inequality that you wrote above represents the context of the problem.

Write your response below.

3. A restaurant claims to have been in business for more than 30 years.

Answer:

4. Write two possible solutions to the inequality you wrote in problem 3.

Answer:

Explain how the inequality that you wrote above represents the context of the problem.

Write your response below

5. A scholar wrote the inequality $x \geq 30$ to represent the scenario in question 3. Do you agree with this inequality? Explain. _____

Write your response below:

-
6. Write an algebraic inequality that matches this phrase:

Ms. Nichols sleeps for five and a half hours or more a night.

Write your response below:

7. Which of the following represents **at most \$20**?

a. $x < \$20$

b. $x > \$20$

c. $x \geq \$20$

d. $x \leq \$20$

Answer:

For numbers 8-9 write an algebraic inequality that matches the phrase.

8. Local fire code requires that a room contain a maximum of 83 people. _____

Answer:

9. An amusement park ride allows a maximum of 40 people to ride at once. _____

Answer:

10. Thomas wrote the inequality $40 \leq x$ to represent the inequality in question 9. Do you agree with this inequality? Explain. _____

Write your response below:

For number 11 write an algebraic inequality that matches the phrase.

11. Ms. Chibbaro eats 8 carrots. _____

Answer:

12. A taxi charges \$1.25 fee plus \$0.10 per mile. You want to spend no more than \$20 on the taxi ride.

a. Write an inequality to represent how much you want to spend on a taxi ride.

Answer:

b. What is the most you are willing to spend on the taxi ride? Explain how you know in reference to the inequality you wrote in part (a).

Write your response below:

13. Franklin weighs 295 pounds and will lose 2 pounds a month. At most, he must weigh 210 pounds in order to qualify for a wrestling championship competition.

Answer:

