

6th Grade  
April 21, 2021

Today we will:

- Review video notes on inequalities
- Take some notes in class
- Begin HW

HOMEWORK:

Pg623 WS

OPTIONAL Assignment on equations for points back on quiz due FRIDAY, APRIL 23. SHOW BALANCING ON EACH SIDE OF THE EQUAL SIGN!

ALEKS time and topics due Monday





Function Machine project due TUESDAY, APRIL 27



Task #1: Check these completed notes and put in notebook if they are not already.

*Inequalities Video Notes, Ch 8 Lesson 5, April 20*

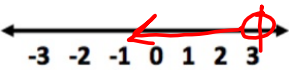
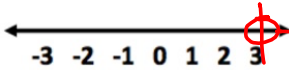
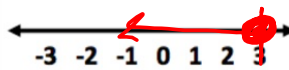
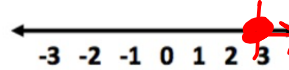
# INEQUALITIES

<p>LESS THAN <math>&lt;</math></p>  <p>Represented on a number line with an open circle. ○</p>	<p>GREATER THAN <math>&gt;</math></p>  <p>Represented on a number line with an open circle. ○</p>	<p>LESS THAN OR EQUAL TO <math>\leq</math></p>  <p>Represented on a number line with a closed circle. ●</p>	<p>GREATER THAN OR EQUAL TO <math>\geq</math></p>  <p>Represented on a number line with a closed circle. ●</p>
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Task #1: Check these completed notes and put in notebook if they are not already.

**Inequalities Video Notes, Ch 8 Lesson 5, April 20**

*Graph the inequalities on the number lines and describe the possible solutions on the lines provided.*

$x < 3$ 	$x > 3$ 	$x \leq 3$ 	$x \geq 3$ 
<p style="color: red;">All numbers less than 3 makes the sentence true. (open circle)</p>	<p style="color: red;">All numbers greater than 3 make the sentence true (open circle)</p>	<p style="color: red;">All numbers that are 3 or less than 3 make the sentence true. (closed circle)</p>	<p style="color: red;">All numbers that are 3 or greater than 3 make the sentence true (closed circle)</p>

Is the given value a solution of the inequality?


$x + 2 < 6$ $x = 3$ ? $3 + 2 < 6$ ? $5 < 6$ ✓ Yes	$x - 5 > 1$ $x = 8$ ? $8 - 5 > 1$ ? $3 > 1$ ✓ Yes	$2x + 1 \leq 11$ $x = 6$ ? $2 \cdot 6 + 1 \leq 11$ ? $13 \leq 11$ ? NO	$3x + 7 \geq 19$ $x = 4$ ? $3 \cdot 4 + 7 \geq 19$ ? $19 \geq 19$ ✓ Yes
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If a bakery sells more than 45 bagels a day, they make a profit. If  $b$  is the number of bagels, then I can say the bakery will make a profit when:  $b > 45$ .  
 Using this inequality, I can determine that the days the bakery makes a profit are: Friday and Saturday

Day	Number of Bagels Sold
Monday	18
Tuesday	25
Wednesday	21
Thursday	36
Friday	50
Saturday	48
Sunday	40






 Name \_\_\_\_\_  
 Unit \_\_\_\_\_ Lesson \_\_\_\_\_ Due Date \_\_\_\_\_

More Examples of Inequalities, Ch8 Lesson 5, April 21

Determine which number is a solution of the inequality. (Example 1)

1.  $9 + a < 17$  7, 8, 9 7

Is  $9 + 7 < 17$ ? Yes  
 $9 + 8 < 17$ ? No  
 $9 + 9 < 17$ ? No

2.  $b - 10 > 5$  14, 15, 16 16

Is  $14 - 10 > 5$ ? No  
 $15 - 10 > 5$ ? No  
 $16 - 10 > 5$ ? Yes

Is the given value a solution of the inequality? (Examples 2-4)

3.  $x - 5 < 5$ ,  $x = 15$

No

Is  $15 - 5 < 5$ ?  
 $10 < 5$  No

4.  $32 \geq 8n$ ,  $n = 3$

Yes

Is  $32 \geq 8 \cdot 3$ ?  
 $32 \geq 24$  Yes

More Examples of Inequalities, Ch8 Lesson 5, April 21

5. The table shows the number of different types of roller coasters in the United States. An amusement park wants to build a new roller coaster. They will only build a roller coaster if there are less than 10 of that type in the United States. Use the inequality  $r < 10$ , where  $r$  is the number of a certain type of roller coaster, to determine which type(s) can be built. (Example 5)

Type	Number
Sit down (steel)	530
Sit down (wood)	112
Inverted	43
Flying	10
Stand up	8
Suspended	5

Stand up and suspended .

6. The table shows the number of different types of movies in Lavar's collection. He wants to buy a new movie to add to his collection. He only wants to buy a movie if he already has more than 15 movies of that type. Use the inequality  $m > 15$ , where  $m$  is the number of the type of movie, to determine which type(s) he can buy. (Example 5)

Movie Type	Number
Action	18
Comedy	24
Drama	12
Thriller	15

Action and comedy

7. The number of text messages Lelah sent each month is shown in the table. She can send no more than 55 messages each month without being charged. Use the inequality  $t \leq 55$ , where  $t$  is the number of text messages in a month, to determine in which months she exceeded her limit. If each additional text costs \$0.25, how much was Lelah charged from January to April?

Month	Text Messages
January	56
February	57
March	55
April	51

January and February

$3 \times 0.25 = \$0.75$

+1  
+2



HOMEWORK Name \_\_\_\_\_  
 Unit \_\_\_\_\_ Lesson \_\_\_\_\_ Due Date \_\_\_\_\_

Pg623-624 WS, Ch8 Lesson 5, Due April 22

Name \_\_\_\_\_ My Homework \_\_\_\_\_

**Extra Practice**

Determine which number is a solution of the inequality.

14.  $5 - h \geq 2$ ; 3, 4, 5 <sup>3</sup> \_\_\_\_\_

15.  $j + 8 \leq 8$ ; 0, 1, 2 \_\_\_\_\_

Try 3.  $5 - 3 \geq 2$   
 $2 \geq 2$  ✓

Try 4.  $5 - 4 \geq 2$   
 $1 \geq 2$  X

Try 5.  $5 - 5 \geq 2$   
 $0 \geq 2$  X

Is the given value a solution of the inequality?

16.  $25 \geq 5u$ ,  $u = 5$  \_\_\_\_\_

17.  $13 \leq 4v$ ,  $v = 3$  \_\_\_\_\_

18. Mrs. Crane recorded the number of sandwiches sold in her deli on one day. If she sells more than 25 of a type of sandwich, she orders more meat from the butcher. Use the inequality  $s > 25$ , where  $s$  is the number of sandwiches sold, to determine which meats she needs to order. \_\_\_\_\_

Sandwich	Number Sold
Club	25
Ham	30
Roast beef	22
Turkey	28

19. The height of each member of a family is listed in the table. In order to ride a certain roller coaster at an amusement park, you must be at least 54 inches tall. Use the inequality  $h \geq 54$ , where  $h$  is a family member's height, to determine who can ride the roller coaster. \_\_\_\_\_

Name	Height (in.)
Carmen	66
Eliot	54
Isabella	49
Jackson	52
Ryan	71

20. **MP Be Precise** Pedro subscribes to a service where he can download up to five free ringtones each month. Each ringtone after that costs \$3.50 each. During which months did Pedro exceed the plan? How much is Pedro's additional cost in 6 months? \_\_\_\_\_

Month	Ringtones
January	5
February	6
March	4
April	8
May	5
June	4



Pg623-624 WS, Ch8 Lesson 5, Due April 22

**CCSS Power Up! Common Core Test Practice**

21. The number of moons for some of the planets are shown in the table.

Planets	Moons	Planets	Moons
Earth	1	Uranus	27
Mars	2	Saturn	47
Neptune	13	Jupiter	63

Let  $m$  represent the number of moons for a planet. Which of the following planets have moons that represent solutions of the inequality  $m > 27$ ? Select all that apply.

- Jupiter       Earth  
 Saturn       Uranus

22. The inequality  $h \geq 48$ , where  $h$  is a person's height in inches, can be used to determine who can ride the Screaming Eagle roller coaster. The table shows the heights of some friends who want to ride the roller coaster.

Name	Height (in.)
Chris	49
Gregorio	56
Heather	53
Jason	48
Molly	47
Tito	44

Complete the chart to show who is and who is not able to ride the roller coaster.

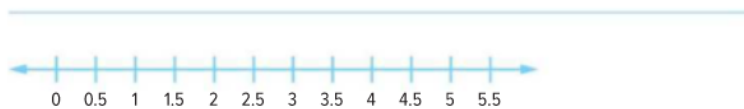
Able to Ride	Not Able to Ride

**CCSS Common Core Spiral Review**

Write an expression to represent each situation. **5.OA.2**

23. Alexis had 5 stickers and her sister gave her 3 stickers. \_\_\_\_\_
24. There were 7 lemons on the lemon tree. Then 2 fell off the tree. \_\_\_\_\_
25. Gavin had 5 packages of hotdogs that each contained 8 hotdogs. \_\_\_\_\_

26. The distance 4 friends walked is shown in the table. Graph the numbers on the number line. Who walked the shortest distance? **4.NBT.2, 5.NBT.3b**



Name	Miles Walked
Corrine	2.5
Makenna	1.5
Noah	3
Tristan	2

27. In one week, Carson read 4 books and Henry read 6 books. Fill in the blanks to compare the number of books they read. **4.NBT.2**

\_\_\_\_\_ > \_\_\_\_\_

**624 Need more practice?** Download more Extra Practice at [connectED.mcgraw-hill.com](http://connectED.mcgraw-hill.com).