

6th Grade
April 23, 2021

Today we will:


- Turn in optional HW
- Review video notes
- Complete Pg631/641 together
- Work on Function Machine if any extra time

HOMEWORK:

ALEKS time and topics
due Monday night at 11:59PM

Function Machine project
due TUESDAY, APRIL 27



 Name _____
 CLASSWORK Unit ____ Lesson ____ Due Date _____

Lesson 5 Skills Practice

Inequalities

Follow the examples from yesterday's HW.

Determine which number is a solution of the inequality.

1. $18 + a > 21$; 2, 3, 4

$18 + 2 > 21$? X
 $18 + 3 > 21$? X
 $18 + 4 > 21$? ✓

4

2. $24 - x \leq 19$; 3, 4, 5

3. $7 + r \geq 18$; 11, 10, 9

11

4. $9 - h > 2$; 6, 7, 8

6

5. $32 - n \leq 17$; 13, 14, 15

15

6. $16 + j \geq 29$; 13, 12, 11

13

7. $10 - f < 7$; 2, 3, 4

4

8. $52 + g < 56$; 5, 4, 3

3

Is the given value a solution of the inequality?

9. $2 + s \geq 10$; $s = 7$

No

10. $14 - r \geq 9$; $r = 6$

Yessss

11. $k - 11 \geq 20$; $j = 32$

$32 - 11 \geq 20$?
 $21 \geq 20$? yes

12. $t + 6 > 40$; $t = 35$

yes

13. $16 + m > 40$; $m = 16$

No

14. $9x \geq 80$; $x = 9$

yes

15. $15 \leq 3z$; $z = 4$

No

16. $2n > 26$; $n = 5$

No

Check completed notes/HW and put in binder if it is not already.

Graph and Solve Inequalities Video Notes,
Ch 8 Lesson 6 & 7, April 23

Left side:

Subtract to UNDO the addition!

what can n be?

$$\begin{array}{r} n + 2 \leq 5 \\ -2 \quad -2 \\ \hline n \leq 3 \end{array}$$

Closed dot because 3 is included as a solution!

Add to UNDO the subtraction!

$$\begin{array}{r} y - 3 > 9 \\ +3 \quad +3 \\ \hline y > 12 \end{array}$$

Open circle because 12 is NOT included as a solution

Solving Ine

Use same steps w equations, but subst inequality sign!

$$\begin{array}{r} x + 18 \geq 30 \\ -18 \quad -18 \\ \hline x \geq 12 \end{array}$$

$$\begin{array}{r} h - 6 \geq 13 \\ +6 \quad +6 \\ \hline h \geq 19 \end{array}$$

Task #1: Check completed notes/HW and put in notebook if it is not already.

Graph and Solve Inequalities Video Notes,
Ch 8 Lesson 6 & 7, April 23

Right side:

Inequalities

We used to solve
substitute the

$2f < 26$
 $f < 13$

$\frac{w}{6} < 5 \cdot 6$
 $w < 30$

Divide to UNDO
the multiplication!

$\div \frac{5x}{5} \leq \frac{45}{5} \div$
 $x \leq 9$

closed circle

Multiply to UNDO
the division!

$\frac{8}{8} x > 3 \cdot 8$

Remember, this means
"divide by 8"

$x > 24$

open circle 24



Name _____

CLASSWORK

Unit 8 Lesson 6-7 Due Date 4/23

Write an inequality for each phrase below.

14. More than 800 fans attended the opening soccer game. $f > 800$

15. The heavyweight division is greater than 200 pounds. $h > 200$

Graph each inequality on a number line.

16. $g < 6$



17. $z > 18$



18. $h \geq 3$



19. On a certain day, the temperature in Bismarck, North Dakota, was below 4°F. Write and graph an inequality to describe the possible temperatures.

$d < 4$



Solve each inequality. Graph the solution on a number line.

13. $a + 4 < 9$ $a < 5$



Homework Help →

$$\begin{array}{r} a + 4 < 9 \\ -4 \quad -4 \\ \hline a < 5 \end{array}$$

14. ~~$x - 8 \geq 13$~~ _____



$$\begin{array}{r} x - 8 \geq 13 \\ +8 \quad +8 \\ \hline x \geq 21 \end{array}$$

15. $d + 13 \geq 22$ _____



16. ~~$25t \leq 100$~~ _____



$$\begin{array}{r} 25t \leq 100 \\ \div 25 \quad \div 25 \\ \hline t \leq 4 \end{array}$$

17. $\frac{g}{2} < 6$ _____



18. $\frac{r}{9} > 8$ _____



19. A community needs to raise at least \$5,000 to build a new skateboarding park. They are selling backpacks for \$25 each to raise the money. Write and solve an inequality to determine the minimum number of backpacks they need to sell in order to reach this goal.

20. A sales associate at a computer store receives a bonus of \$100 for every computer he sells. He wants to make \$2,500 in bonuses next month. Write and solve an inequality to find the minimum number of computers he must sell.

MP Model with Mathematics Solve each inequality. Graph the solution on a number line.

21. $n + \frac{2}{7} \geq \frac{1}{2}$ _____



22. $0.2g > 1.8$ _____



