

Warm-Up

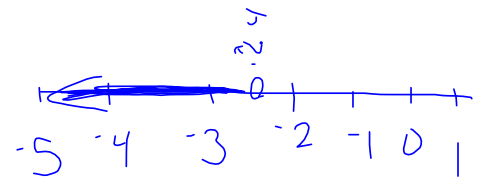
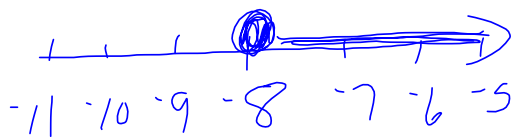
February 13, 2020

Graph the following:

A) $x \geq -8$
 ← equal to

B) $y < 3$
 $3 > y$

C) $r < -2.4$



Section 6.4 Solving Inequalities using addition and subtraction...

What you already know

$$x - 4.5 = 6.2$$

(Handwritten: box around -4.5 with x+4.5 above it, and x+4.5 to the right of the equation)

$$x = 10.7$$

$$x - 4.5 \geq 6.2$$

$$x - 4.5 + 4.5 \geq 6.2 + 4.5$$

(Handwritten: box around -4.5 + 4.5)

$$x \geq 10.7$$

Graph



$$a + 4 > 3$$

$$a > -1$$

A. Solve

B. Graph



Rewrite with variable on left side

$$13 \leq 4 + x$$

$$13 < x - 4$$

$$4 + x \geq 13$$

$$x - 4 > 13$$

$$x + 4 \geq 13$$

$$90 + 5d < 100 + 4d$$

$$90 + 1d < 100$$

$$\frac{1d}{1} < \frac{10}{1}$$

$$d < 10$$

A. Solve
B. Graph



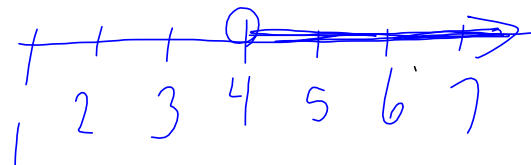
$$7t - 4 > 3t + 12$$

$$4t - 4 > 12$$

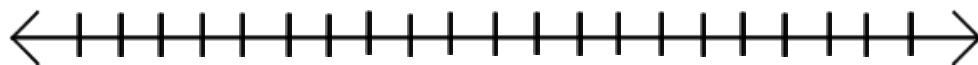
$$4t \boxed{-4+4} > 12+4$$

$$\frac{4t}{4} > \frac{16}{4}$$

$$t > 4$$



- Solve
- Graph



Solve
Graph

$$7k-9 \leq -2(-3k+8) + 4$$

$$7k-9 \leq 6k \boxed{-16+4}$$

↓ group

$$7k-9 \leq 6k-12$$

$$|k-9| \leq -12$$



$$k \leq -3$$

$$k \leq -3$$

$$\overset{(12)}{\frac{x}{4}} + \overset{(12)}{\frac{2}{3}} < \overset{(12)}{\frac{5}{6}} + \overset{(12)}{2} \quad LCM = 12$$

$$\frac{12x}{4} + \frac{24}{3} < \frac{60}{6} + 24$$

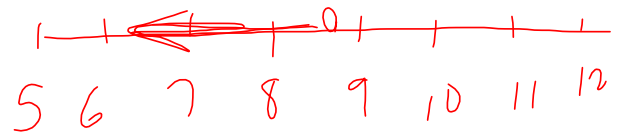
$$3x + 8 < 10 + 24$$

$$3x + \boxed{-8} < 34 \overset{-8}{-8}$$

$$\frac{3x}{3} < \frac{26}{3}$$

$$x < 8\frac{2}{3}$$

$$x < 8.6$$



- 1. Textbook page 298
- # 8 [solve then graph]
- #9 [solve then graph]

2. Worksheet 1-9

Answers
Pg 516

From Wednesday

Work on your paper
Graph on sheet

Pg 292

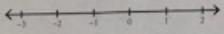
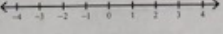
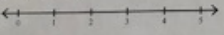
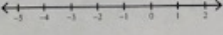
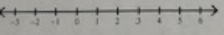
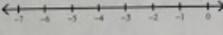
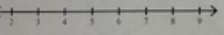
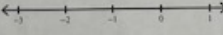
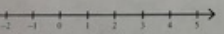
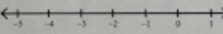
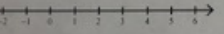
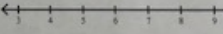
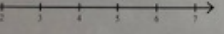
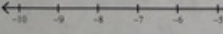
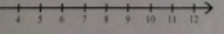
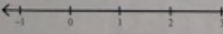
3, 4, 5, 8

Worksheet
even #'s

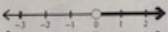
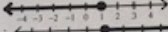
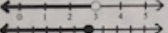
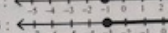
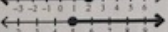
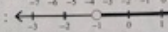
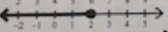
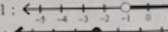
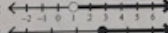
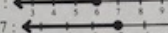
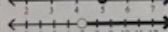
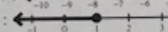
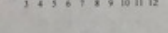


Date _____ Period _____

Assignment

Solve each inequality and graph its solution.

1) $28 < 7(6n + 4)$ 	2) $7(2k + 3) \leq 35$ 
3) $-8(-x + 5) < -16$ 	4) $-78 \leq 8(5n - 4) - 6$ 
5) $21 \geq -7(7 - 5v)$ 	6) $-8(1 - 2p) \geq -56$ 
7) $54 \leq -6(1 - 2x)$ 	8) $8(8x + 5) > -24$ 
9) $-8(4 - 4x) \leq 8x + 16$ 	10) $-14 + v > -5(v + 4)$ 
11) $-18 + 2x > 8(-6x + 4)$ 	12) $x - 36 \leq -2(-3 + 3x)$ 
13) $-n - 31 \geq -2(4n - 2)$ 	14) $7k - 9 \leq -2(-3k + 8)$ 
15) $-2b + 14 > -6(b - 7)$ 	16) $-38 - 7k \leq -5(1 + 8k)$ 

Answers to Assignment (ID: 1)

1) $n > 0$: 	2) $k \leq 1$: 
3) $x < 3$: 	4) $n \geq -1$: 
5) $v \leq 2$: 	6) $p \geq -3$: 
7) $x \geq 5$: 	8) $x > -1$: 
9) $x \leq 2$: 	10) $v > -1$: 
11) $x > 1$: 	12) $x \leq 6$: 
13) $n \geq 5$: 	14) $k \leq -7$: 
15) $b > 7$: 	16) $k \leq 1$: 