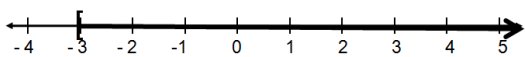
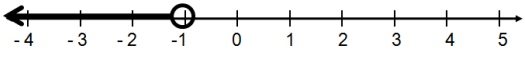


1ST 5
 Writing Inequalities – Write an inequality for each graph

1) 

2) 

Graph the inequalities.

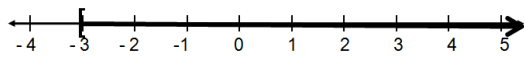
3) $x < -3$ 4) $0 \geq x$ 5) $x > 4$


6) Rewrite the inequality with the variable on the left. $-8 < x$

7) Is -2 a solution of $2 - 3x \geq 8$?

Inequalities Day 2

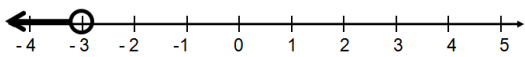
1ST 5 ANSWERS
 Writing Inequalities – Write an inequality for each graph


1) 
 $x \geq -3$

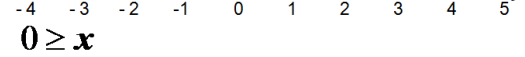
2) 
 $x < -1$

Inequalities Day 2

1ST 5 ANSWERS
 Writing Inequalities – Write an inequality for each graph

3) 
 $x < -3$

4) 
 $0 \geq x$

5) 
 $x > 4$

Inequalities Day 2

1ST 5 ANSWERS

6) Rewrite the inequality with the variable on the left. $-8 < x$
 $x > -8$

7) Is -2 a solution of $2 - 3x \geq 8$?

$$2 - 3(-2) \geq 8 \quad \text{YES}$$

$$2 + 6 \geq 8$$

$$8 \geq 8$$

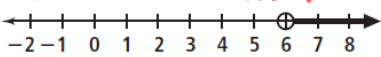
True

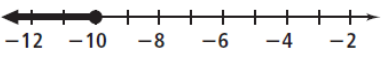
Inequalities Day 2

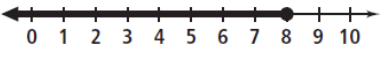
Practice 3-1

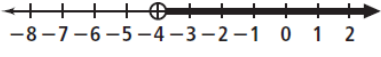
1a. yes 1b. no 1c. yes 2a. no 2b. yes 2c. yes
 3a. no 3b. yes 3c. no 4a. yes 4b. yes 4c. yes
 5a. no 5b. yes 5c. yes 6a. no 6b. yes 6c. no
 7a. no 7b. yes 7c. no 8. $x > -5$ 9. $x \leq -5$
 10. $x < 3$ 11. $x \geq -8$

Inequalities Day 2

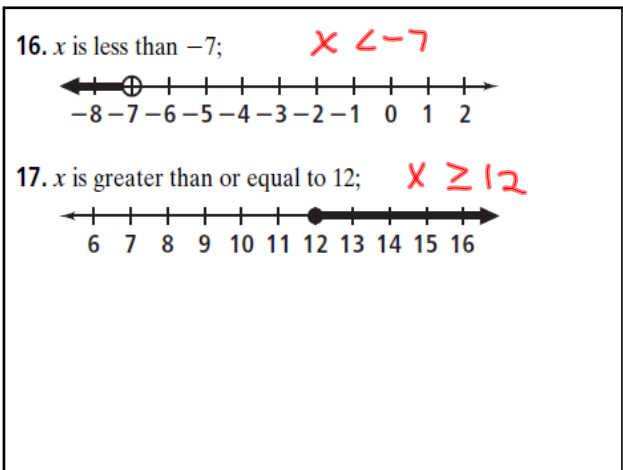
12. x is greater than 6; $x > 6$


13. y is less than or equal to -10 ; $y \leq -10$


14. 8 is greater than or equal to b ; $b \leq 8$


15. -4 is less than w ; $w > -4$


Inequalities Day 2



Inequalities Day 2

18. Let t = temperature (in degrees Fahrenheit); $t \leq 38$
19. Let w = weight (in lb); $w \leq 2000$
20. Let n = number of students; $n \geq 20$
21. Let n = number of people; $n \leq 250$
22. Let s = speed (in mi/h); $s \leq 55$
23. Let n = number of points; $450 \leq n \leq 500$
24. Let c = circumference (in in.); $c \geq 9.00$
25. C 26. D 27. B 28. A

Inequalities Day 2

SOLVING INEQUALITIES USING ADDITION AND SUBTRACTION

o Using the Addition Property of Inequality

- Solve $x - 3 < 5$. Graph the solution.

$$\begin{array}{r} x - 3 < 5 \\ +3 \quad +3 \\ \hline x < 8 \end{array}$$
- Solve $m - 6 > -4$. Graph the solution.

$$\begin{array}{r} m - 6 > -4 \\ +6 \quad +6 \\ \hline m > 2 \end{array}$$

Handwritten notes: $x - 3 = 5$
 $\begin{array}{r} x - 3 = 5 \\ +3 \quad +3 \\ \hline x = 8 \end{array}$

Inequalities Day 2

SOLVING INEQUALITIES USING ADDITION AND SUBTRACTION

o Solving and Graphing

- $12 \leq x - 5$

$$\begin{array}{r} 12 \leq x - 5 \\ +5 \quad +5 \\ \hline 17 \leq x \end{array}$$
 $x \geq 17$
- $n - 7 \leq -2$

$$\begin{array}{r} n - 7 \leq -2 \\ +7 \quad +7 \\ \hline n \leq 5 \end{array}$$

Inequalities Day 2

SOLVING INEQUALITIES USING ADDITION AND SUBTRACTION

o Using the Subtraction Property of Inequality

- Solve $y + 5 < -7$

$$\begin{array}{r} y + 5 < -7 \\ -5 \quad -5 \\ \hline y < -12 \end{array}$$
- Solve $t + 3 \geq 8$

$$\begin{array}{r} t + 3 \geq 8 \\ -3 \quad -3 \\ \hline t \geq 5 \end{array}$$

Inequalities Day 2

1) $x - 1 > 10$

$$\begin{array}{r} x - 1 > 10 \\ +1 \quad +1 \\ \hline x > 11 \end{array}$$

Inequalities Day 2

(2)

$$\begin{array}{r} -5 > b - 1 \\ +1 \quad +1 \\ \hline -4 > b \\ b < -4 \end{array}$$

Inequalities Day 2

(3)

$$\begin{array}{r} 8 < n - 2 \\ +2 \quad +2 \\ \hline 10 < n \\ n > 10 \end{array}$$

Inequalities Day 2

(4)

$$\begin{array}{r} w + 4 \leq 9 \\ -4 \quad -4 \\ \hline w \leq 5 \end{array}$$

Inequalities Day 2

(5)

$$\begin{array}{r} -2 \geq 4 + a \\ -4 \quad -4 \\ \hline -6 \geq a \\ a \leq -6 \end{array}$$

Inequalities Day 2

PW 27

Workbook pg. 36 # 1-20,
27-42

Do on separate
Sheet & turn in.