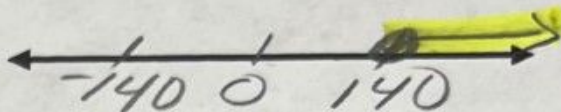# HW: Nov. 16 Answer Key

HOMEWORK: Use page 9 to show your work.

Directions #s 1- 4: Write an inequality to represent the statement. Then graph its solution set.
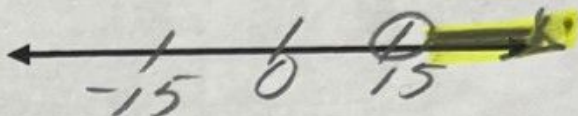
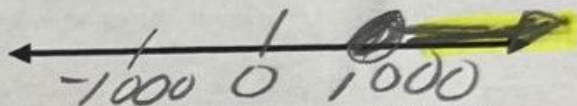1. The Devito family spent no less than $140 for dinner.

$x \geq 140$

-140   0   140

2. The waiting time for a table is more than 15 minutes.
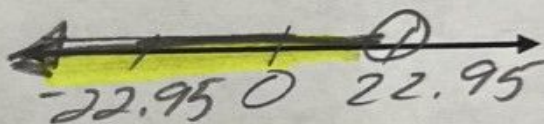
$x > 15$

-15   0   15

3. At Bellport Middle School, there are no less than 1,000 students.

$x \geq 1000$

-1000   0   1000

4. The price of all special dinner entrees is below $22.95.

$x < 22.95$

-22.95   0   22.95
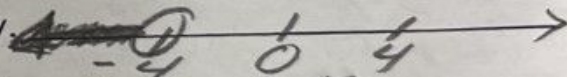
5. Given the inequality: $-4 > x$

a. Write the inequality in sentence form.

-4 is greater than x

b. Graph the solution set for the inequality.

-4   0   4

c. Can the solution set contain −4? Explain. no, b/c

-4 is not greater than -4.

Review: Solve for each equation by clearing the fractions and decimals.

6.	7.
$\dfrac{1}{6}w + \dfrac{5}{8} = -11$	$-3x - 4.6 = 5.9 - 5x$
8.	9.
$3(h - 4) = 12h + 16 - 9h$	$15 - 2(4n + 7) = -6n - 2(n + 1) + 3$

HW: inequality

LCD

$\frac{4}{24}$ $\frac{3}{24}$ $\frac{}{24}$

6) $24\left[\frac{1}{8}w + \frac{5}{8} = \frac{-11}{1}\right]$

$4w + 15 = -264$

$\quad\quad -15 \quad -15$

$\frac{4w}{4} = \frac{-279}{4}$ $\quad w = 69.75$

7) $10\left[-3x - 4.6 = 5.9 - 5x\right]$

$-30x - 46 = 59 - 50x$

$+50x \quad\quad\quad +50x$

$20x - 46 = 59$

$\quad\quad +46 \quad +46$

$\frac{20x}{20} = \frac{105}{20}$

$x = 5.25$

8) $3(h-4) = 12h + 16 - 9h$

$3h - 12 = 3h + 16$

$-3h \quad\quad -3h$

$-12 \neq 16$

no solution

9) $15 - 2(4n+7) = -6n - 2(n+1) + 3$

$15 - 8n - 14 = -6n - 2n - 2 + 3$

$-8n + 1 = -8n + 1$

same

all real #s