

Unit 4 Problem Set.

Unit: Inequalities
Homework 1

Name _____
Date _____ Pd _____

IS EVERYTHING EQUAL?

Substitute each variable to determine whether the inequality statement is true or false.

1. $k + 12 \geq 20, k = 15$

2. $-16 > -f, f = 15$

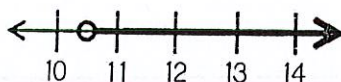
3. $q > d, d = 3$

Write an inequality for each solution set graphed below.

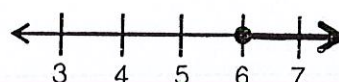
4.



5.



6.

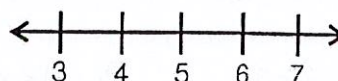
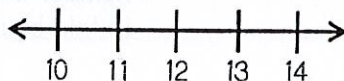
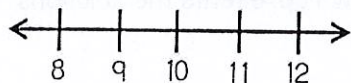


Practice graphing the following inequalities:

7. $k \leq 8$

8. $13.5 \geq f$

9. $d < 4$



Based on the verbal expression below, write and graph an inequality.

10. The Parkland Zoo has a maximum capacity of 350 visitors (v).






11. Trina must spend at least 45 minutes (m) studying for her test.



HOW DO YOU SOLVE AN INEQUALITY?

Solve the following one-step inequalities, check your work, and graph the solution.

1	$18 \geq -2x$	2	$\frac{x}{4} \leq 8$	3	$x - 7 > -11$
✓		✓		✓	
GRAPH		GRAPH		GRAPH	
					

4. Which inequality is true when $x = 4$?

A. $x + 5 \leq 3$ B. $9x > 36$

C. $\frac{x}{2} < 3$ D. $18 \leq x - 8$

5. Which inequality is NOT true when $x = -2$?

A. $6x < -10$ B. $-2x > -3$

C. $\frac{x}{4} \leq 0$ D. $-4 \leq x - 5$

6. Jasmine is baking and selling cupcakes for \$15 per dozen. She would like to make more than \$120 in cupcake sales. Which number line below represents the solutions to this situation?

