

Math 9 –Solving Linear Inequalities In-class Practice Test

Name: _____

PLEASE CHECK YOUR ANSWERS WITH THE ANSWER KEY PROVIDED AND ASK FOR HELP IF YOU CANNOT GET THE SOLUTION ON YOUR OWN.

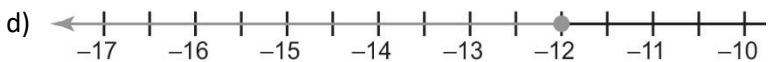
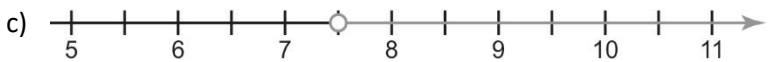
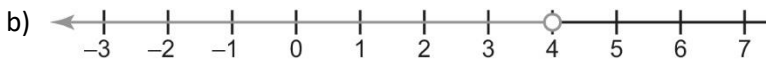
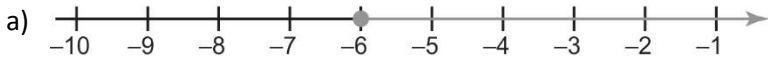
1. State 3 values of the variable that satisfy each inequality.
 a) $c < 7$ b) $a \geq -3$ c) $5 < n$ d) $-1 \geq y$

2. Verify which of the following satisfy the inequality given.

a. $x - 3 \leq 19$

$x = 22$		$x = 21$		$x = 23$	
Left Side	Right Side	Left Side	Right Side	Left Side	Right Side
$x - 3 \leq 19$		$x - 3 \leq 19$		$x - 3 \leq 19$	

3. Write the inequality that is graphed on each number line.

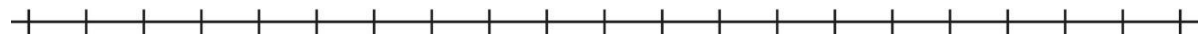


4. Write an inequality to describe each situation, then graph it.

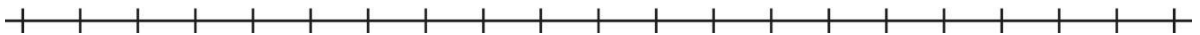
a) The gas tank in a car contains no more than 55 L of gas. _____



b) The minimum age you must be to watch the movie is 13. _____



c) Children under 36" get into the water park for free. _____



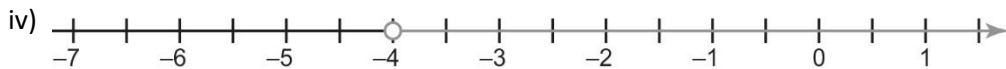
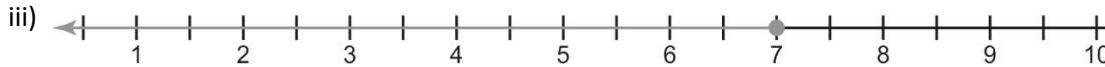
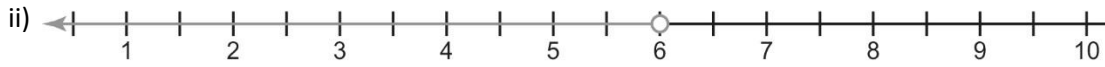
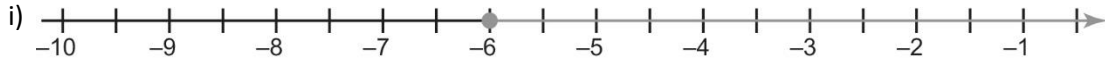
5. Solve each inequality and find the graph of its solution below.

a) $g + 3 < 9$

c) $2 + y \geq -4$

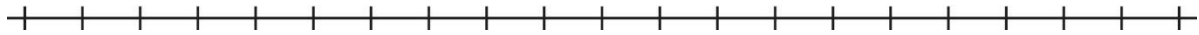
b) $5 \geq m - 2$

d) $-1 < f + 3$

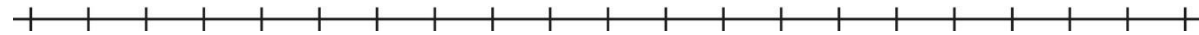


5. Solve each inequality and graph the solution. Please show all your work.

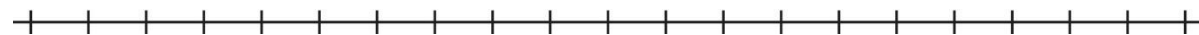
a) $-3.5a < -1.3a + 6.6$



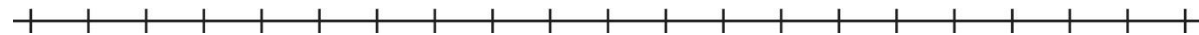
b) $\frac{-5f}{6} - 2 > 3$



c) $1 - 3x \leq -2x - 4$



d) $-3(n - 3) \leq 4(5 - n)$



Claire has \$18. She wants to buy a book and a magazine. The book costs \$13.28. How much can Claire spend on a magazine?

- a) Choose a variable, then write an inequality that can be used to solve this problem.
- b) Solve the problem.

6. Company A charges \$17, plus \$11 per day to rent a piece of equipment.

Company B charges \$33, plus \$9 per day to rent the same piece of equipment. **(4)**

- a) How many days must the piece of equipment be rented for the cost to be the same at both companies?
- b) How many days must the piece of equipment be rented for Company B to be less expensive?

