

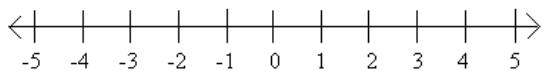
Name: _____ Date: _____ Period: _____

Algebra 1- Chapter 3 Sections 1-4 STUDY GUIDE
Writing, Solving and Graphing Inequalities

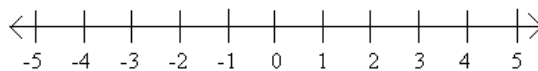
1. $14n + 3 \leq 10n - 9$

2. $7b + 21 \geq 35$

Solution:



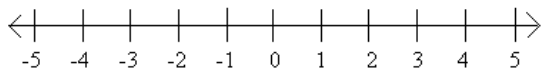
Solution:



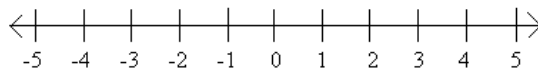
3. $7 + 2.5c > 3.9c$

4. $-\frac{1}{3}(12x + 21) \geq 4x + 1$

Solution:



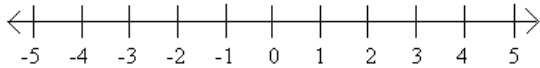
Solution:



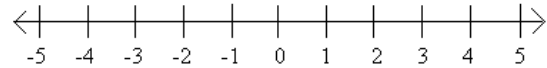
5. $\frac{1}{4}(8d + 4) > 2d + 1$

6. $3(3a - 5) - a < 5(a - 3.5)$

Solution:



Solution:



****Numbers 7 and 8 may have more than 1 answer.**

7. Circle the following that are solutions to $y + 5.3 \leq 12.3$

a. -3

b. 0

c. $-\frac{13}{4}$

d. -2.9

e. no solution

8. Circle the following that are solutions to $-4y < -21$

a. $\frac{23}{4}$

b. 0

c. $\frac{8}{3}$

d. 5.5

e. no solution

Write an inequality to model each phrase.

9. Twelve is less than a fourth of a number x .

10. Twenty less than a number m is no more than 100.

Write an inequality to model each situation and then solve. Be sure to define your variable and use your units!

11. A student wants to buy one of the discounted iPhone 5 models at Walmart for \$129.00. They have already saved 45 dollars. This student also mows lawns in their neighborhood at a rate of \$15/lawn. How many lawns does the student need to mow to have at least enough money (ignore tax) for the phone?

12. The same student as above has parents that won't let him get a iPhone unless his mean(average) score in all 4 classes is at least 80%. So far he has an 83% in Algebra, 75% in Physics First, and 72% in Spanish. What are the range of grades for US History that this student needs in order to earn his iPhone?

