

# Algebra 2 Chapter 1 Practice Test

Name: \_\_\_\_\_

Time> Start: \_\_\_\_\_ Finish: \_\_\_\_\_

Total Time = \_\_\_\_\_

Solve the following equations or inequalities for the given variable. Don't forget there can be NO SOLUTIONS, INFINITE NUMBER OF SOLUTIONS, or just 1 solution.

1.  $-6(2a - 3) = -2(5a + 2)$

2.  $4n = 2(2n - 3)$

3.  $\frac{2n - 5}{6} = \frac{n + 3}{2}$

4.  $-4n - 2n - (n - 4) = n - 4$

5.  $2(3n - 1) = -2 + 6n$

6.  $\frac{c - 1}{2} + 4 = 9$

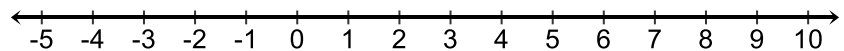
7.  $5n - 3 > -n + 15$

8.  $-4n \leq 8$

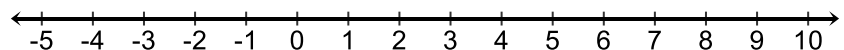
9.  $-d + 18 - 12 \leq -20$

Graph the following Compound Inequalities

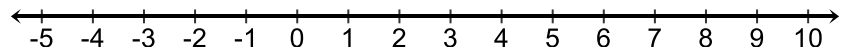
10.  $n > -2$  AND  $n \leq 3$



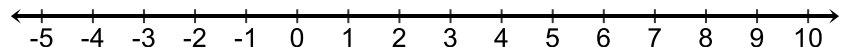
11.  $4 < n \leq 8$



12.  $n > 5$  OR  $n < -2$

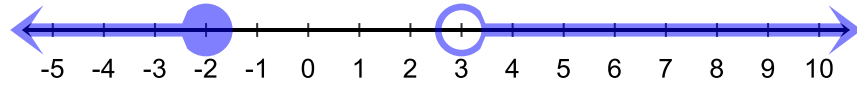


13.  $n \geq 3$  OR  $n \leq 5$

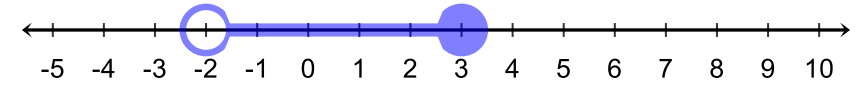


Consider the graphed inequalities and give the correct compound inequality expression.

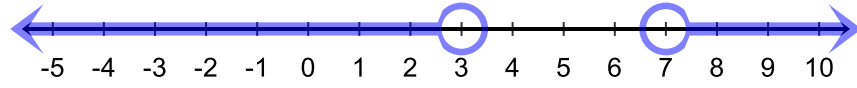
14. \_\_\_\_\_



15. \_\_\_\_\_



16. \_\_\_\_\_



Solve the following Absolute Value Equations.

17.  $|n + 1| - 3 = 9$

18.  $-5|n + 4| = -15$

19.  $|n + 2| = 3n - 10$

Solve the following Absolute Value Inequalities - some might be No Solution or Infinite #.

20.  $|2n + 1| ≤ 19$

21.  $2|2n + 3| < 14$

22.  $|n + 7| > -5$

23.  $|-2n + 3| > 11$

24.  $|2n + 1| ≤ -7$

25.  $\frac{|2x - 4|}{3} > 2$

\_\_\_\_\_ 26. How many solutions does  $2|-x - 3| = 6$  have?

\_\_\_\_\_ 27. Which is NOT a solution for  $|3x + 6| < 12$ ?  
A. -4                      B. 3                      C. 1

D. -1

\_\_\_\_\_ 28. How many roots does  $-2|2x - 1| = 8$  have?

\_\_\_\_\_ 29. How many solutions can Absolute value equations have?  
A. 0  
B. 1  
C. 2  
D. 0 OR 1  
E. 1 OR 2  
F. 0, 1, OR 2

30. Explain below what is meant by an extraneous solution?