Name _____ Date _____ Period ____

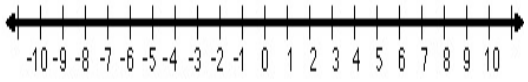
Algebra I
Compound Inequalities/Word Problems Worksheet

Solve and graph the following compound inequalities.

1. $3x+4>7$ or $2x+3<-5$

2. $6 \geq 4x-2 > -6$

3. $1 \leq \frac{x}{2} < 4$



4. $2y-3>-1$ or $5-y>4$

5. $3x-5 \leq 4$ or $\frac{x+6}{-3} \leq -5$

6. $7 > -3x+4 > -2$

7. Is -7 a solution to #1?

8. Is 2 a solution to #2?

9. Give a number that is NOT a solution to #4.

10. Give a number that IS a solution to #6.

11. For a wrestler to be allowed to wrestle at the 145lb. weight class, they must weigh between 132.1 and 145.0, inclusively. Write a compound inequality to represent the allowed weights.

12. John's first four test scores were 80, 65, 87, and 75. What does he need to score on his fifth test if he wants to keep an average of at least 80?

13. Mrs. Williams is deciding between two fields trips for her class. The Science Center charges $135 plus $3 per student. The Cargenie Museum charges $5 per student. For how many students will the Science Center be less expensive than the Carnegie Museum?

14. At 2:00pm, two cars start at the same point, one driving northbound at 45mph and the other driving southbound at 60mph. At what time will the two cars be 525 miles apart?

	Rate x Time = Distance		