Lesson 4.9C ~ Inequalities
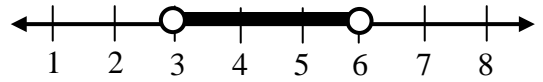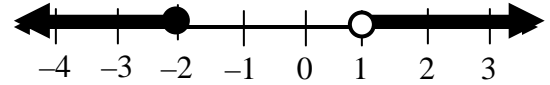
Name_____ Period_____ Date_____

A **compound inequality** is two or more inequalities joined together with *or* or *and*.

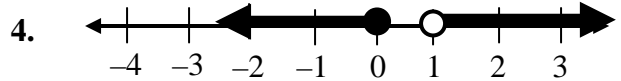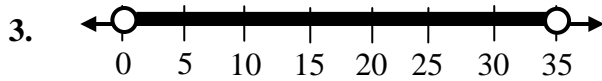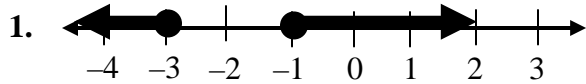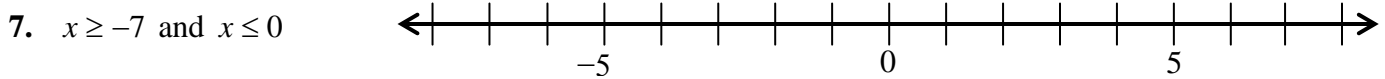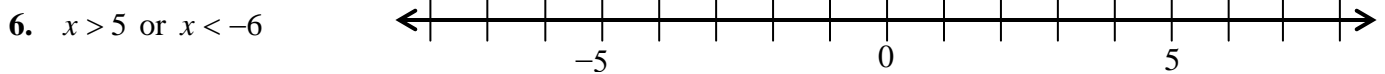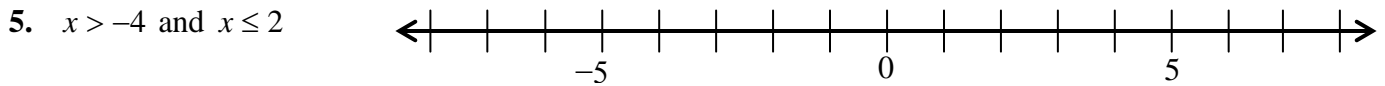For example, the graph at the right shows $x > 3$ *and* $x < 6$.

Compound inequalities can also be written as *or* statements.
The graph at the right shows $x \leq -2$ or $x > 1$.

Write a compound inequality for each graph shown. Use *x* as the variable. Be sure to specify *and* or *or* between the inequalities.
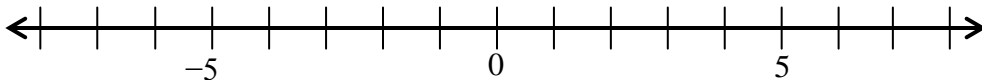
1.

2.

3.

4.

Graph the following compound inequalities on a number line.

5. $x > -4$ and $x \leq 2$

6. $x > 5$ or $x < -6$

7. $x \geq -7$ and $x \leq 0$

Write and graph the compound inequality for each situation.

8. Jules has more than two animals (*a*) and at most 7 animals.

Inequalities: _____

9. The temperature (*t*) is either less than −3 degrees or greater than 2 degrees.

Inequalities: _____