


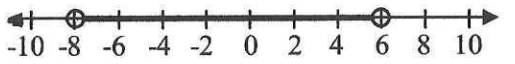

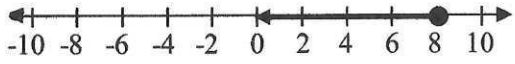
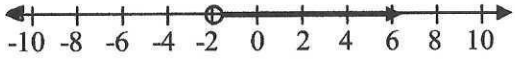
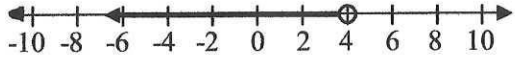
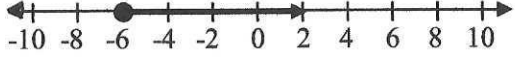

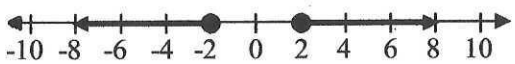
Name: _____

Date: _____

Interval Notation and Infinite Sets Algebra 1 Homework

Skills

1. Represent each interval graphed below with both set builder and interval notation.

Graphed Interval	Set Builder Notation	Interval Notation
		
		
		
		
		
		
		
		
		

2. The set of all real numbers less than or equal to 5 could be expressed as

(1) $(5, \infty)$ (3) $(-\infty, 5)$

(2) $[5, \infty)$ (4) $(-\infty, 5]$ _____

3. The set $\{x: -10 \leq x < 8\}$ can be written in interval notation as

(1) $[-10, 8)$ (3) $(-10, 8)$

(2) $[-10, 8]$ (4) $(-10, 8]$ _____

4. The set of all positive real numbers can be expressed as which of the following?

(1) $[1, \infty)$ (3) $(0, \infty)$

(2) $[0, \infty)$ (4) $(-\infty, 0]$ _____

5. Which of the following represents a closed interval?

(1) $[-5, 4]$ (3) $(-3, 7)$

(2) $[7, 12)$ (4) $(-6, 2]$ _____

6. Which of the following intervals represents all numbers between 5 and 10 exclusive?

(1) $[5, 10]$ (3) $(5, 10]$

(2) $(5, 10)$ (4) $[5, 10)$ _____

7. The solution set to the inequality $35 - 4x < 11$ can be written as

(1) $(-\infty, 6)$ (3) $(6, \infty)$

(2) $[6, \infty)$ (4) $(-\infty, 6]$ _____