Interval & Inequality Notation Homework

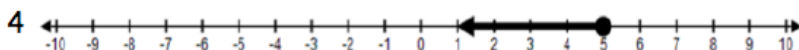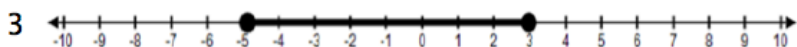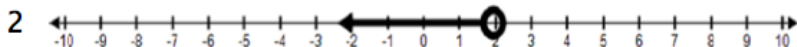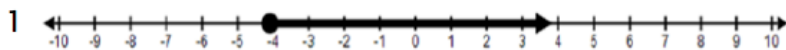*Check your answers (on the next page), and write the number of any problems you would like to go over on the board when you come into class tomorrow.* ☺

For #1-6, provide the interval notation and inequality notation for each graph.

1.

2.

3.

4.

5.

6.
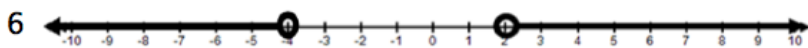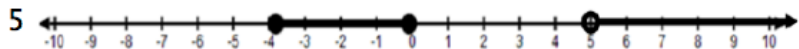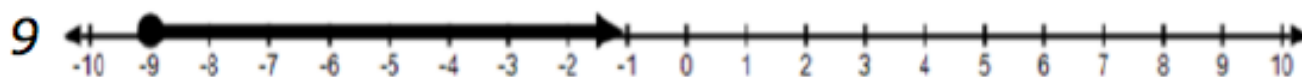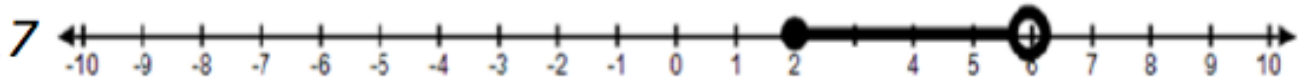
For #7-10, sketch each on a number line.

7. [2, 6]
8. (-8,0)
9. [-9, ∞)
10. (-6,0] U [3, ∞)

11. When would you use set notation? What type of brackets are used for a set?

<u>Solutions</u>

1. $[-4,\infty)$, $n \geq -4$
2. $(-\infty,2)$, $n < 2$
3. $[-5,3]$, $3 \leq n \leq 5$
4. $(-\infty,5]$, $n \leq 5$
5. $[-4,0] \cup (5,\infty)$, $-4 \leq n \leq 0 \cup n > 5$
6. $(-\infty,-4) \cup (2,\infty)$, $n \leq -4 \cup n > 2$

7

8

9

10

11. Only use set notation when you have a set of values that is possible to list by hand. These brackets represent a set: { }