Name _____ Student No._____ G___/____ Date: _____Score: _____
Nickname: _____ Worksheet No.: _____

Simplifying Interval Notation

A. Simplify the given interval notation.

1) $(-\infty, 1] \cup [-8, \infty)$

Simpliest Form:

2) $[-4, 0) \cup [-8, 3)$

Simpliest Form:

3) $[-7, 7) \cup [-4, 3)$

Simpliest Form:

4) $(-\infty, 1] \cup (-8, \infty)$

Simpliest Form:

5) $(-\infty, 3] \cup [1, 9) \cup (7, \infty)$

Simpliest Form:

6) $(-\infty, 4) \cup [2, 10] \cup [5, \infty)$

Simpliest Form:

Polynomial Inequality

B. Give the solution set to the given polynomial inequality.

1) $-(x-1)(x+1)(x+2)^2 \geq 0$

Solution Set:

2) $(x-1)^2(x+2)(x+3) < 0$

Solution Set:

3) $-(x-2)(x-1)(x+1)(x+2) > 0$

Solution Set:

4) $(x+1)(x+3)^2 < 0$

Solution Set:

5) $(x+1)^3(x+2)(x+3) \leq 0$

Solution Set:

6) $(x-1)(x+1)(x+2)^2(x+3) \geq 0$

Solution Set:

7) $-(x-2)(x+1)(x+3)^2 \leq 0$

Solution Set:

8) $(x+1)(x+2)^3 < 0$

Solution Set: