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

Simplifying Interval Notation

A. Simplify the given interval notation.

1) $(-\infty, 3) \cup [-6, 0]$

Simpliest Form:

2) $[-8, 3] \cup [-5, 0]$

Simpliest Form:

3) $[-10, 5] \cup [-2, 4]$

Simpliest Form:

4) $[-2, 4] \cup [-4, 4]$

Simpliest Form:

5) $(-\infty, 4) \cup [2, 9] \cup [7, \infty)$

Simpliest Form:

6) $(-\infty, 2) \cup [5, 9] \cup [7, \infty)$

Simpliest Form:

Polynomial Inequality

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

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

Solution Set:

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

Solution Set:

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

Solution Set:

4) $(x+1)(x+2)^2 \leq 0$

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set: