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

Simplifying Interval Notation

A. Simplify the given interval notation.

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

Simpliest Form:

2) $(-\infty, 5] \cup (-3, \infty)$

Simpliest Form:

3) $[-4, 4) \cup [-1, \infty)$

Simpliest Form:

4) $(-\infty, 0] \cup (-7, \infty)$

Simpliest Form:

5) $(-\infty, 4) \cup [1, 11] \cup [5, \infty)$

Simpliest Form:

6) $(-\infty, 3] \cup [1, 11) \cup (5, \infty)$

Simpliest Form:

Polynomial Inequality

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

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set: