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

Simplifying Interval Notation

A. Simplify the given interval notation.

1) $(-1, 2] \cup (-8, 2]$

Simpliest Form:

2) $(-\infty, 3) \cup [-4, 4]$

Simpliest Form:

3) $[-10, 5] \cup [-1, 2]$

Simpliest Form:

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

Simpliest Form:

5) $(-\infty, 3) \cup [4, 12] \cup [6, \infty)$

Simpliest Form:

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

Simpliest Form:

Polynomial Inequality

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

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set: