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

Simplifying Interval Notation

A. Simplify the given interval notation.

1) $[-9, 5] \cup [-7, 2]$

Simplest Form:

2) $(-\infty, 0] \cup [-4, \infty)$

Simplest Form:

3) $(-\infty, 6] \cup (0, 10]$

Simplest Form:

4) $(-\infty, 3) \cup (0, \infty)$

Simplest Form:

5) $(-\infty, 2] \cup [3, 9) \cup (6, \infty)$

Simplest Form:

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

Simplest Form:

Polynomial Inequality

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

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set: