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

Simplifying Interval Notation

A. Simplify the given interval notation.

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

Simpliest Form:

2) $(-\infty, 6] \cup (-8, \infty)$

Simpliest Form:

3) $[-7, 5] \cup [-6, 5]$

Simpliest Form:

4) $[-6, 5] \cup [-8, 2]$

Simpliest Form:

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

Simpliest Form:

6) $(-\infty, 2) \cup [7, 10] \cup [5, \infty)$

Simpliest Form:

Polynomial Inequality

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

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

8) $(x+2)^2(x+3)^2 \geq 0$

Solution Set: