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

Simplifying Interval Notation

A. Simplify the given interval notation.

1) $[-3, 2) \cup [3, \infty)$

Simplest Form:

2) $[-2, 2) \cup [2, \infty)$

Simplest Form:

3) $(-\infty, 2) \cup (1, \infty)$

Simplest Form:

4) $[-6, 4) \cup [-4, \infty)$

Simplest Form:

5) $(-\infty, 4) \cup [7, 11] \cup [6, \infty)$

Simplest Form:

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

Simplest Form:

Polynomial Inequality

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

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set: