

Name \_\_\_\_\_ Student No. \_\_\_\_\_ G\_\_\_\_/\_\_\_\_ Date: \_\_\_\_\_ Score: \_\_\_\_\_  
Nickname: \_\_\_\_\_ Worksheet No.: \_\_\_\_\_

## Simplifying Interval Notation

### A. Simplify the given interval notation.

1)  $[-3, 0) \cup [-7, 1)$

4)  $(-\infty, 6] \cup (2, 11]$

Simpliest Form:

Simpliest Form:

2)  $(-\infty, 1] \cup (-7, \infty)$

5)  $(-\infty, 4] \cup [3, 11) \cup (6, \infty)$

Simpliest Form:

Simpliest Form:

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

6)  $(-\infty, 4) \cup [6, 9] \cup [7, \infty)$

Simpliest Form:

Simpliest Form:

## Polynomial Inequality

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

1)  $-(x-1)^4 < 0$

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

Solution Set:

Solution Set:

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

Solution Set:

$$4) -(x+1)^4 > 0$$

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set: