

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

## Simplifying Interval Notation

### A. Simplify the given interval notation.

1)  $[-7, 0] \cup [-8, 0]$

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

Simpliest Form:

Simpliest Form:

2)  $[-1, 4) \cup [-4, \infty)$

5)  $(-\infty, 3) \cup [4, 11] \cup [7, \infty)$

Simpliest Form:

Simpliest Form:

3)  $(-\infty, 3) \cup (7, \infty)$

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

Simpliest Form:

Simpliest Form:

## Polynomial Inequality

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

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

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

Solution Set:

Solution Set:

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

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

Solution Set:

Solution Set:

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

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

Solution Set:

Solution Set:

$$5) -(x-2)(x-1)(x+1) > 0$$

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

Solution Set:

Solution Set: