

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

## Simplifying Interval Notation

### A. Simplify the given interval notation.

1)  $[-1, 1) \cup [-5, -1)$

4)  $[-1, 2) \cup [-3, \infty)$

Simpliest Form:

Simpliest Form:

2)  $(-\infty, 4) \cup (7, \infty)$

5)  $(-\infty, 4) \cup [4, 10] \cup [7, \infty)$

Simpliest Form:

Simpliest Form:

3)  $(-5, 2] \cup (-5, 4]$

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

Simpliest Form:

Simpliest Form:

## Polynomial Inequality

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

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

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

Solution Set:

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set: