

Name _____ Student No. _____ G ____/____ Date: _____ Score: _____
Nickname: _____ Worksheet No.: _____

Simplifying Interval Notation

A. Simplify the given interval notation.

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

4) $(-\infty, 2) \cup (0, \infty)$

Simpliest Form:

Simpliest Form:

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

5) $(-\infty, 2) \cup [7, 9] \cup [6, \infty)$

Simpliest Form:

Simpliest Form:

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

6) $(-\infty, 2] \cup [7, 12) \cup (6, \infty)$

Simpliest Form:

Simpliest Form:

Polynomial Inequality

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

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

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

Solution Set:

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set: