

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

Simplifying Interval Notation

A. Simplify the given interval notation.

1) $[-2, 3) \cup [0, \infty)$

4) $(-\infty, 7] \cup [-8, \infty)$

Simpliest Form:

Simpliest Form:

2) $[-6, 4) \cup [0, \infty)$

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

Simpliest Form:

Simpliest Form:

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

6) $(-\infty, 3] \cup [1, 9) \cup (7, \infty)$

Simpliest Form:

Simpliest Form:

Polynomial Inequality

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

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

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

Solution Set:

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

$$6) -(x-2)(x+1)(x+2) < 0$$

Solution Set:

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

Solution Set:

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

Solution Set: