

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

Simplifying Interval Notation

A. Simplify the given interval notation.

1) $(-\infty, 3] \cup (-3, \infty)$

4) $[-7, 6] \cup [-6, 4]$

Simpliest Form:

Simpliest Form:

2) $[-1, 3] \cup [7, 10]$

5) $(-\infty, 3) \cup [5, 12] \cup [5, \infty)$

Simpliest Form:

Simpliest Form:

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

6) $(-\infty, 2) \cup [1, 12] \cup [5, \infty)$

Simpliest Form:

Simpliest Form:

Polynomial Inequality

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

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

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

Solution Set:

Solution Set:

$$3) \ (x - 1)(x + 1)(x + 3) < 0$$

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set:

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

Solution Set: