

Test Data for Program Assignment 4

Note: (a) Your program must be able to determine if there exists a solution.

(b) The optimal value may be negative infinity.

(1)

Input: Minimize y s.t.

$$-x + 4y \leq 3$$

$$5x - 7y \leq 12$$

$$-5x - 2y \leq -3$$

Output: -1.000000

(2)

Input: Minimize y s.t.

$$3x + 2y \leq 9$$

$$y \leq 3$$

$$-5x - 2y \leq -3$$

Output: Negative infinity

(3)

Input: Minimize y s.t.

$$-x - y \leq -2$$

$$x - y \leq 1$$

$$-x + 3y \leq -3$$

Output: No feasible solution

(4)

Input: Minimize y s.t.

$$y \leq 172$$

$$x - 2y \leq 2$$

$$-387x - 7y \leq 959$$

$$5x - 3y \leq 12$$

$$-99x - 2y \leq 150$$

$$13x - 2y \leq 120$$

$$-17x - 29y \leq 290$$

$$49x - 3y \leq 291$$

$$-7x - 13y \leq -14$$

Output: 0.000000