Test Data for Program 2

Note: (a) You may decide the format of inputs on your own.
For example, the inequality "$-x + 4y \le 3$" can be presented as "−1 4 3."
(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.
$-x + 4y \le 3$
$5x - 7y \le 12$
$-5x - 2y \le -3$
Output: −1.000000

(2)
Input: Minimize y s.t.
$3x + 2y \le 9$
$y \le 3$
$-5x - 2y \le -3$
Output: Negative infinity

(3)
Input: Minimize y s.t.
$-x - y \le -2$
$x - y \le 1$
$-x + 3y \le -3$
Output: No feasible solution

(4)
Input: Minimize y s.t.
$y \le 172$
$x - 2y \le 2$
$-387x - 7y \le 959$
$5x - 3y \le 12$
$-99x - 2y \le 150$
$13x - 2y \le 120$
$-17x - 29y \le 290$
$49x - 3y \le 291$
$-7x - 13y \le -14$
Output: 0.000000