

Name: _____
MATH 101
Spring 2022
HW 11: Due 04/12

*“When you are dissatisfied and would
like to go back to youth, think of
Algebra”*

– Will Rogers

Problem 1. (10pt) Determine whether $(x, y) = (3, -1)$ is a solution to the following system of equations:

$$4x - 6y = 18$$

$$5x + y = 12$$

Problem 2. (10pt) Use substitution to solve the following system of equations:

$$2x - y = 11$$

$$5x + 2y = 14$$

Problem 3. (10pt) Use elimination to solve the following system of equations:

$$3x - 5y = -23$$

$$2x + 10y = 10$$

Problem 4. (10pt) Determine whether the following system of equations has a solution:

$$-3x + 5y = -4$$

$$6x - 15y = 18$$