

Name: _____

MATH 101

Fall 2021

HW 20: Due 12/10

“Give me some of your tots!”

*–Napoleon Dynamite,
Napoleon Dynamite*

Problem 1. (10pt) Determine if the system of equations below has a solution. If it does, find it; if not, explain why.

$$x + y = 5$$

$$x - y = 9$$

Problem 2. (10pt) Determine if the system of equations below has a solution. If it does, find it; if not, explain why.

$$\begin{aligned}15x - 6y &= 10 \\ -5x + 2y &= -8\end{aligned}$$

Problem 3. (10pt) Determine if the system of equations below has a solution. If it does, find it; if not, explain why.

$$5x + 3y = 7$$

$$3x - 2y = -11$$

Problem 4. (10pt) Determine if the system of equations below has a solution. If it does, find it; if not, explain why.

$$5x - 6y = 3$$

$$2x + 3y = 3$$