

Name: \_\_\_\_\_

MATH 100

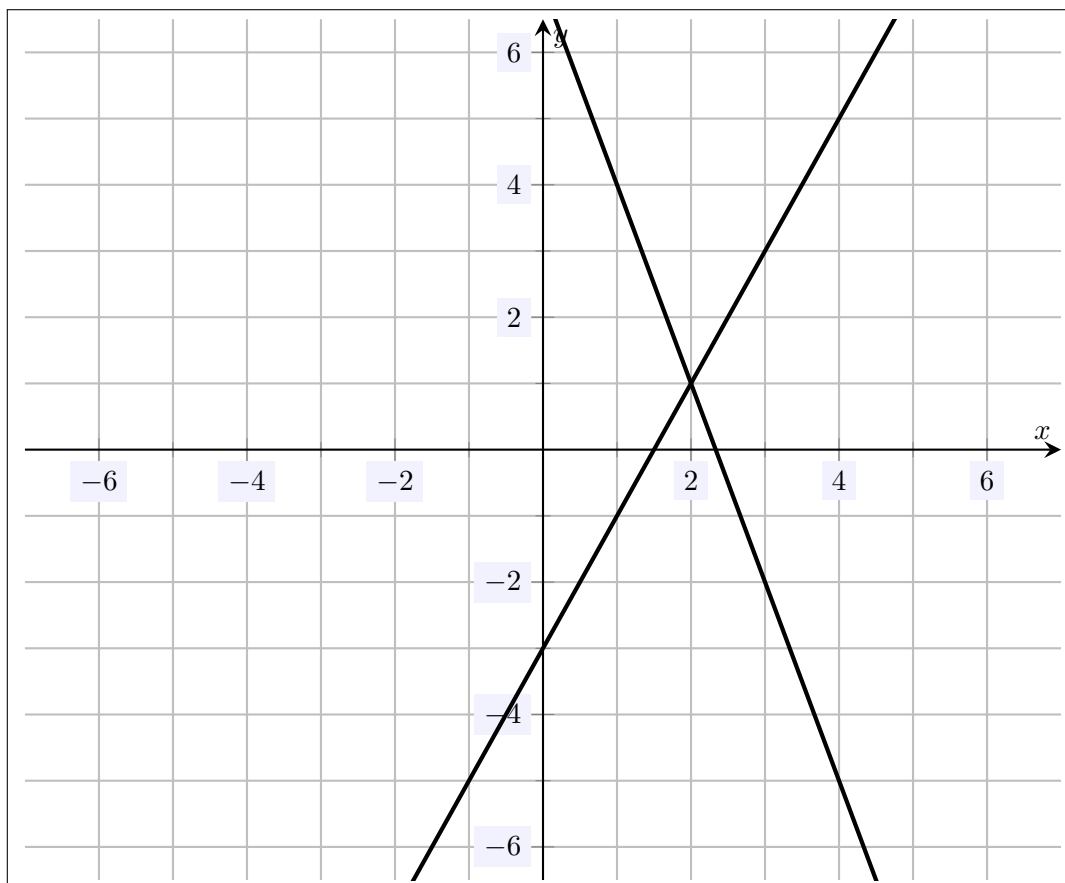
Fall 2021

HW 15: Due 12/08

*"Nothing goes over my head. My reflexes are too fast. I would catch it."*

*–Drax, Guardians of the Galaxy*

**Problem 1.** (10pt) Find and plot the solution to the system of equations given in the graph below:



**Problem 2.** (10pt) Show that  $(1, -2)$  is the solution to the system of equations below.

$$-5x + 3y = -11$$

$$3x - 5y = 13$$

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

$$4x - 3y = -7$$

$$2x + 4y = 13$$

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

$$10x - 4y = 12$$

$$-5x + 2y = 4$$