

Show your work and box your final answer. If you run out of room, continue on the back.
You have 20 minutes. No calculators.

Name and section: _____

1. (5 points) Find all solutions to the linear system

$$\begin{aligned}3x - 4y &= 25 \\ x + y &= -1.\end{aligned}$$

2. (5 points) Consider the linear system

$$\begin{aligned}cx + 9y &= -6 \\ x + cy &= 2.\end{aligned}$$

For what values of c does this system have no solutions? A unique solution? Infinitely many solutions?