Please show **all** your work! Answers without supporting work will not be given credit. Write answers in spaces provided.

Name:_____

1. [**5 pts**] Find all solutions **via Gauss Elimination** to the system of linear equations.

$$\begin{cases} 3x + 2y = 4 \\ 2x + 5y = 1 \end{cases}$$

Answer:_____

2. [**5 pts**] Reduce the augmented matrix into a **REDUCED** row echelon form:

$$\left[\begin{array}{ccc|c} 4 & -3 & -2 & 7 \\ 3 & 0 & 2 & 8 \\ 2 & 3 & -1 & 2 \end{array}\right]$$

Answer:_____